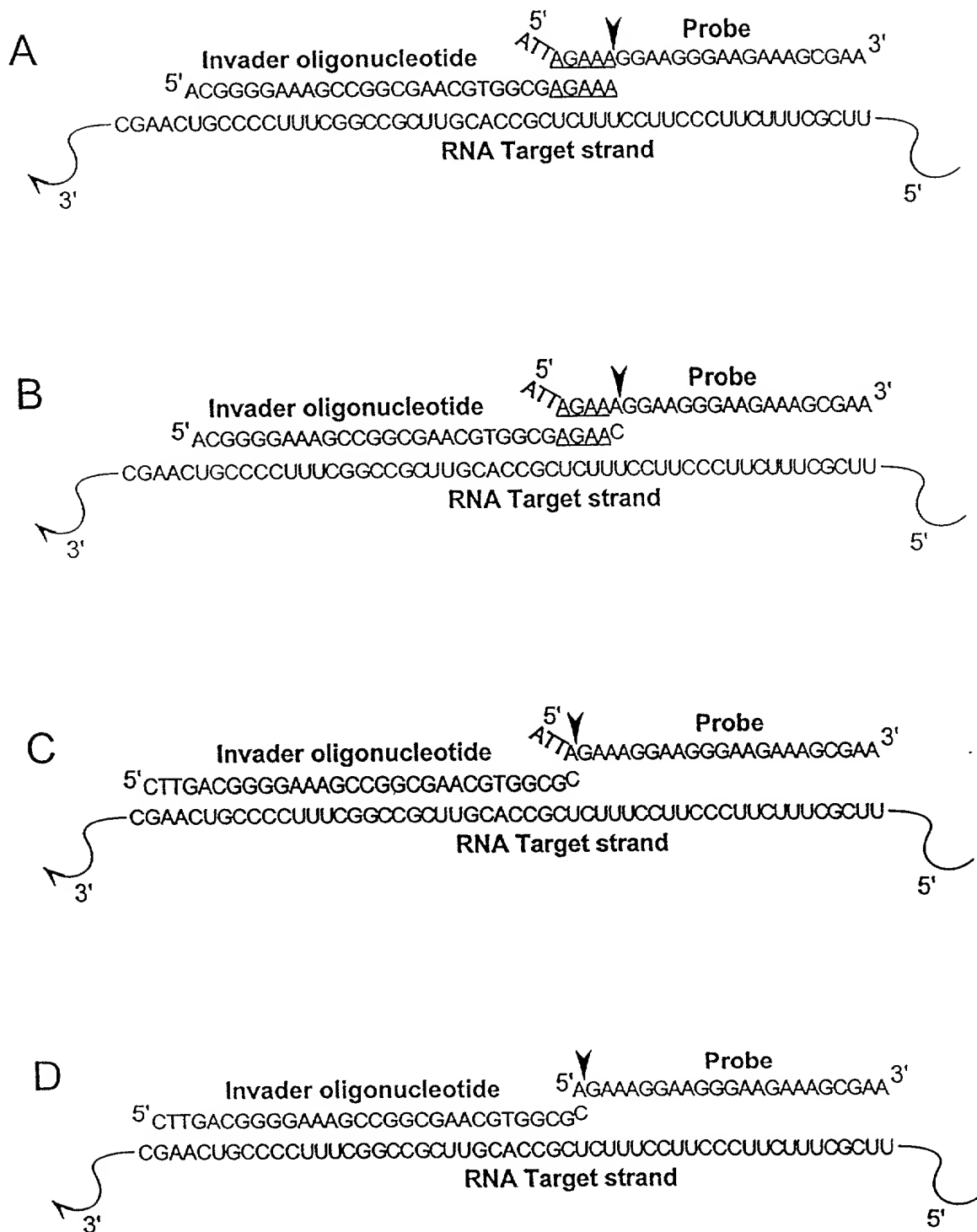


FIGURE 1

1/145

# FIGURE 2



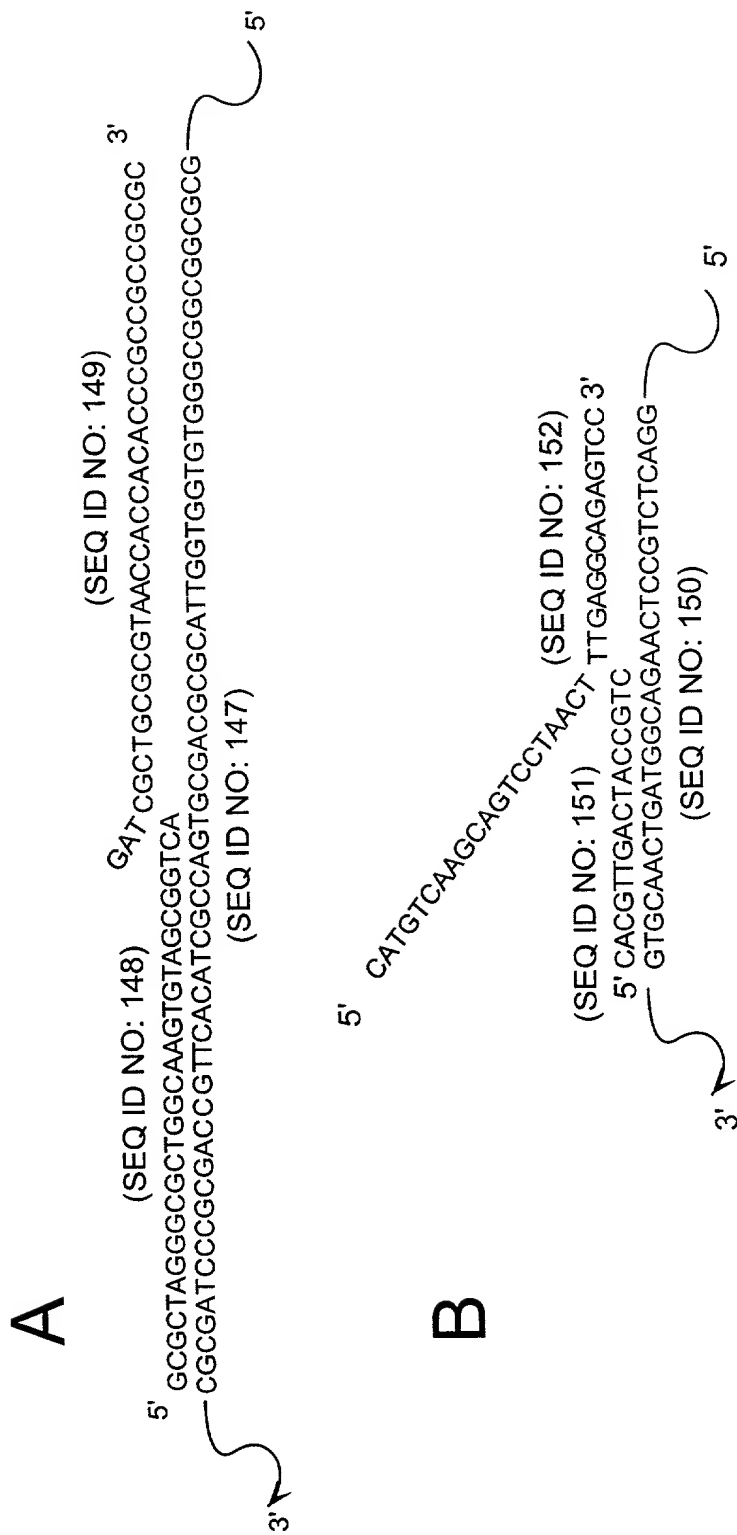


FIGURE 3

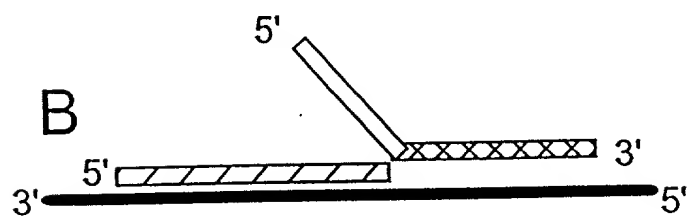
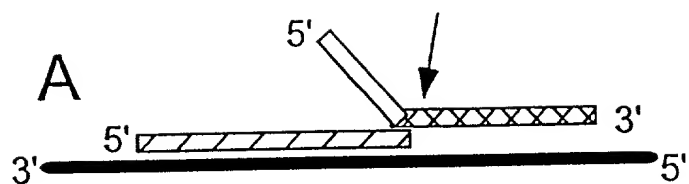


FIGURE 4



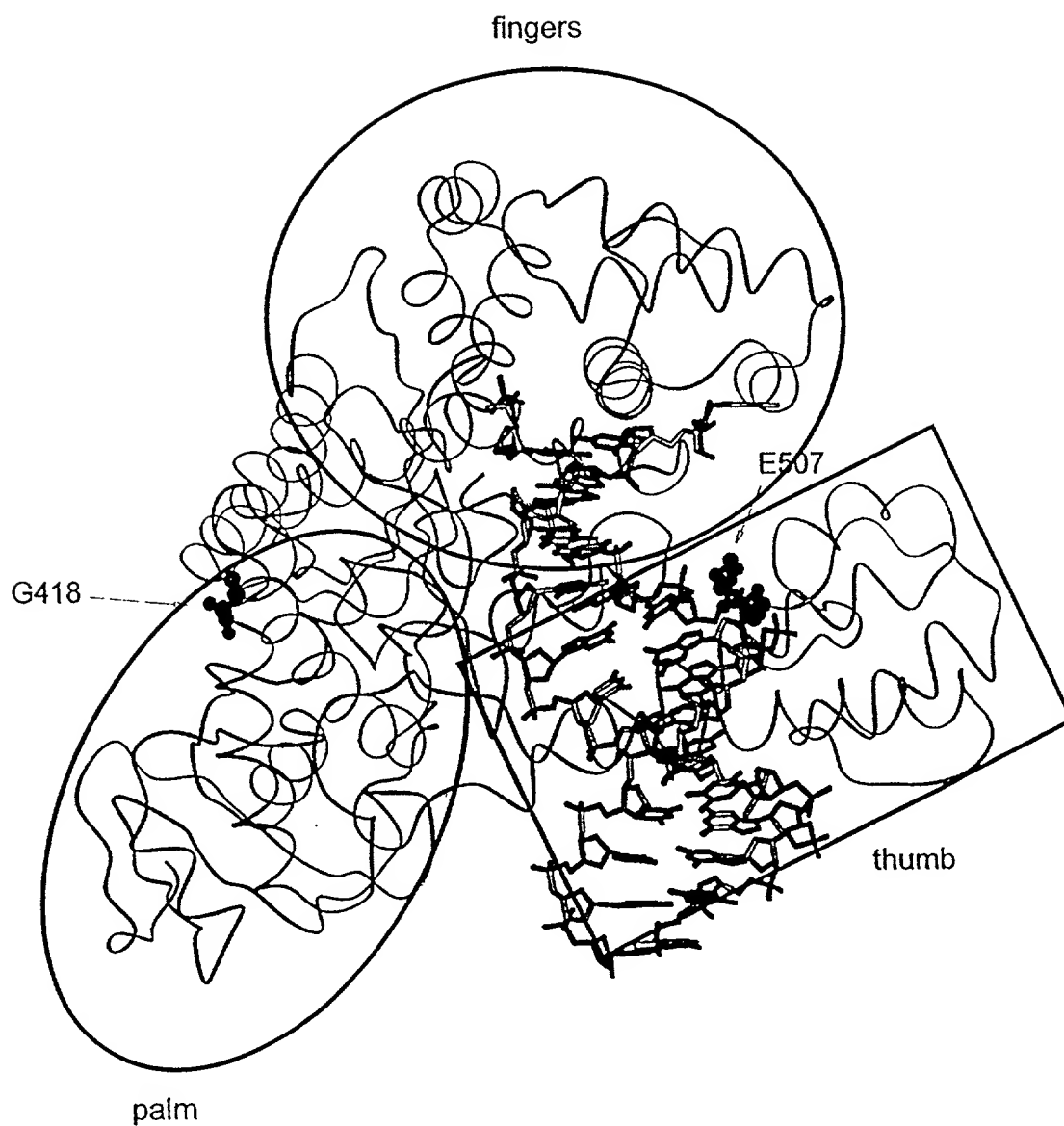


FIGURE 5

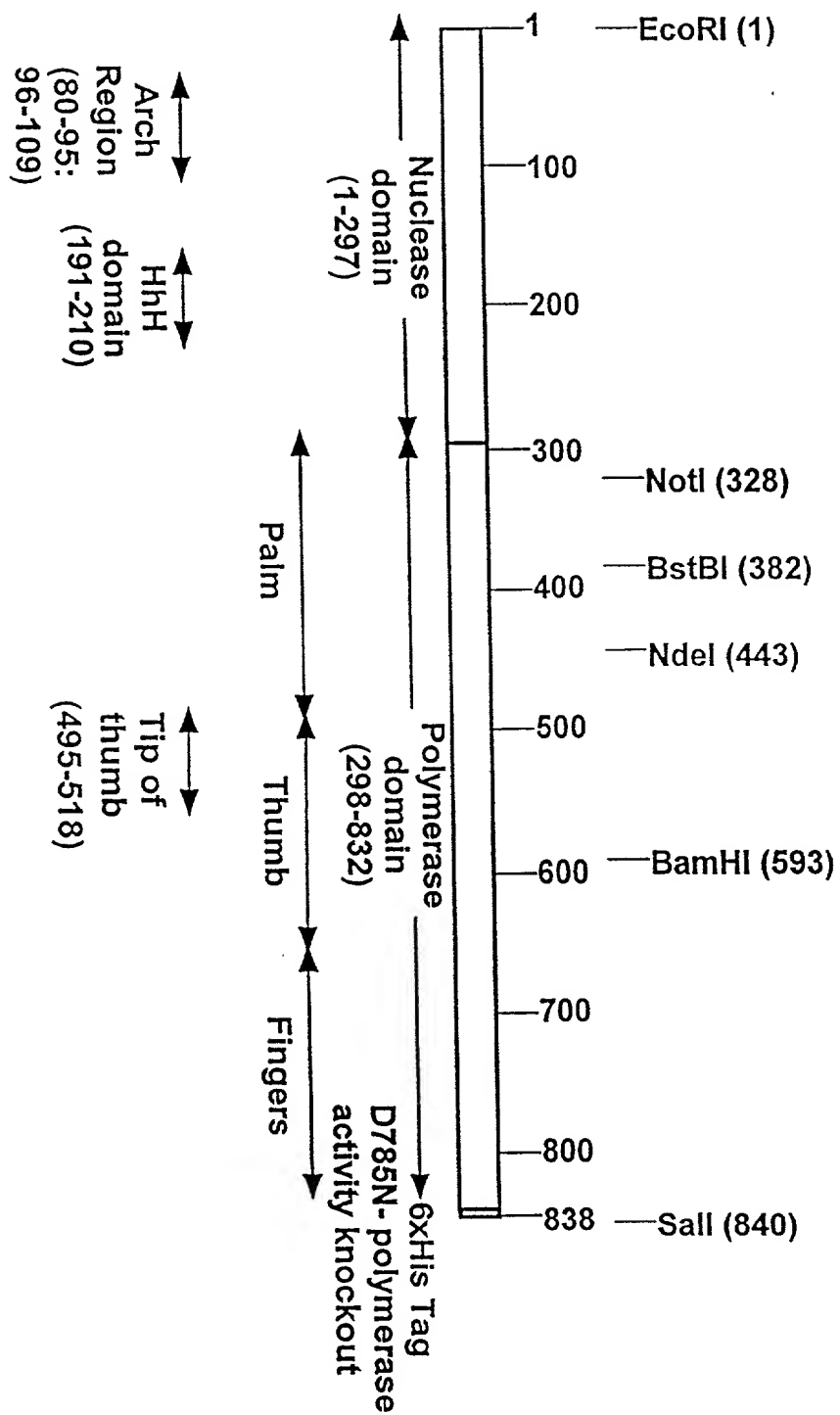


FIGURE 6

104220 9634350

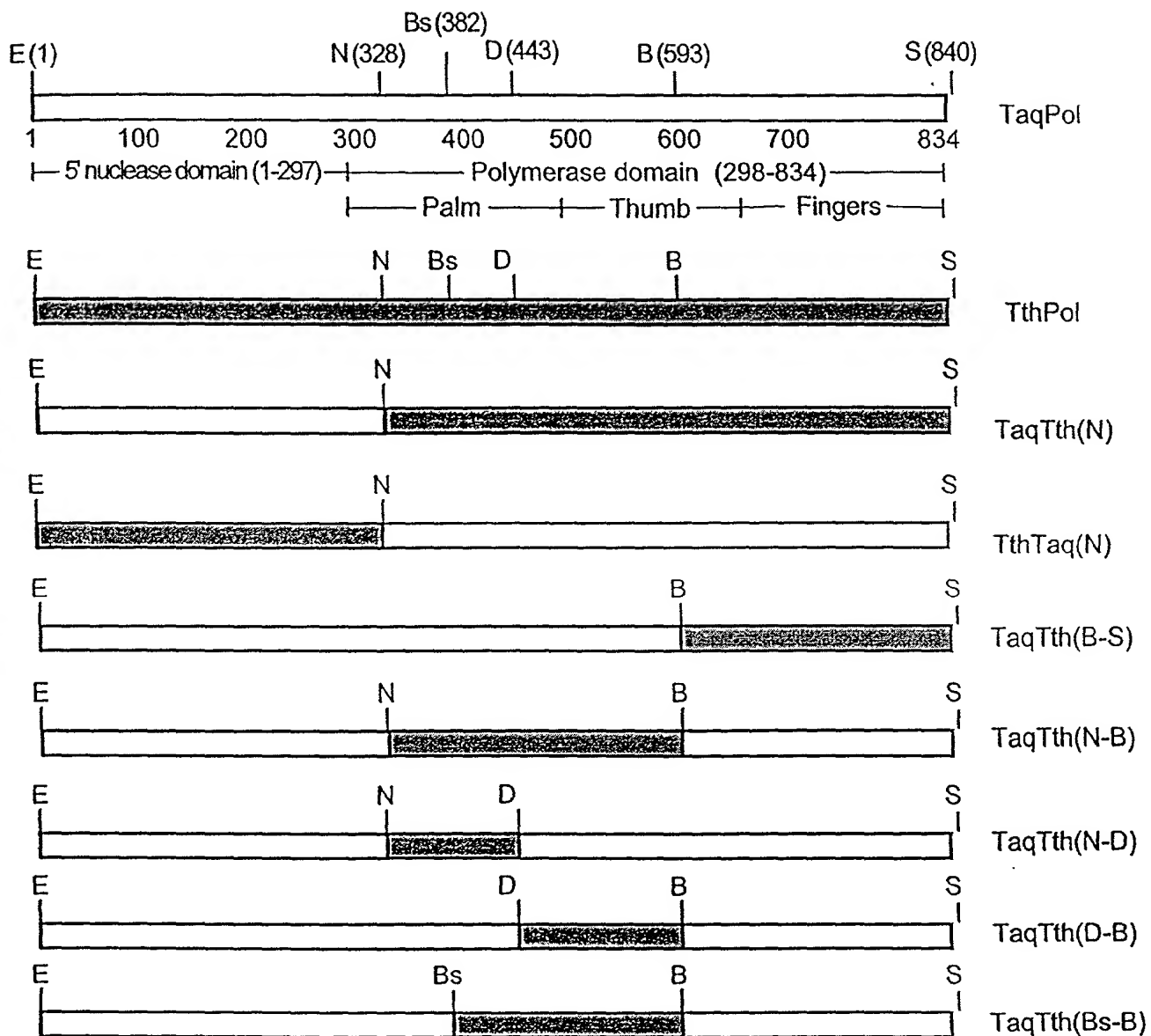


FIGURE 7

7/145

FIGURE 8A

MAJORITY	[SEQ ID NO:156] ATGXXGGGGATGCTTGGCCCTCTTTGAGGCCAAAGGGGGGTCCTGCTGGTGGAGGGGAGCAGCTGGCCT	
DNAPTAQ	[SEQ ID NO:153]... AG.. G..... G.....	70
DNAPTFL	[SEQ ID NO:154]... .. C.. G.....	67
DNAPTTH	[SEQ ID NO:155]... GA..... A.....	70
MAJORITY	ACCGCAGCCTTCTTGGCCCTGAAGGGCCTCAGCAGCAGCGGGGCGAAGCGGTGCAGGGCGCTCTACGGCCT	
DNAPTAQ	..... GA.....	140
DNAPTFL	..... T..... C..... G.. G.....	137
DNAPTTH	..... .. G.....	140
MAJORITY	CGCGAAGAGGCTCCTCAAGGCCCTGAAGGAGGACGGGGGACXXGGGGGTGXTGGTCTTTGAGCGCAAG	
DNAPTAQ	..... .. C.....	207
DNAPTFL	..... A..... GT.. T.....	204
DNAPTTH	..... .. T.. AA.. G.. GT.....	210
MAJORITY	GGCGCCTCCTTCGGCCAGGAGGGCTAGGAGGCTACAAGGGGGGGGGGGGGGGGGGGAGGAGCTTTC	
DNAPTAQ	..... .. G.. GG.....	277
DNAPTFL	..... ..	274
DNAPTTH	..... .. GA..... G..... G..... G..	280
MAJORITY	CGCGGCAGCTGGCCCTCATCAAGGAGCTGCTGGAGCTCCTGGGGCTTCGGGGCCTCGAGGTCGGCGGGCTA	
DNAPTAQ	..... A.....	347
DNAPTFL	..... G..... T..... A.. C..... T.. G.. G..... T.....	344
DNAPTTH	..... .. T..... T.. A.. C.....	350

9/145

MAJORITY [SEQ ID NO:156] TCCAGGGCCACATGGAXGAGCTGAXGCTCTCTGGGAGGCTXTCGAGG|GGGAGGGHGG|GGGGG|GGG

DNAPTAQ	[SEQ ID NO:153]	T.....G..T....A.....C.GG.A.	764
DNAPTFL	[SEQ ID NO:154]	GGG.....G.C...GCC.T...C.A...T.A..T	761
DNAPTHH	[SEQ ID NO:155]	A.....C.....G.G.....T.....C..G..C.	770

MAJORITY GGTGGACTTCGGCCAAAGXGGCGGGAGCGCGGAGCGGCTTAGGGCCCTTCTCGAGAGCGCTGGAGTTT

DNAPTAQ	.....AA.....A.....T.....	834
DNAPTFL	.....GG.G.C.C..CACA..A..T.....T.....	831
DNAPTTH	.....C.....C..G.....C.....C.....	840

MAJORITY GGCAGGGCTCGTCCAGGAGTTGGGGCTCGTGGAGGGCCCAAGGCCCTGGAGGAGGGCCGCTGGCGCGCGCG

DNAPTAAQ	.....T.....AA.....	.....	904
DNAPTFL	.....G.....GCCA.....	T.	901
DNAPTTH	.....C.....CCCC.....	.....	910

MAJORITY CCGAAGGGGGCTTGGTGGGCTTTGTGGCTTTCCGGCCCGAGCCCATGTGGCCCGAGCTTCTGGCCCTGGG

DNAPTAQ	.....G.....AAG.....T.....	974
DNAPTEL	.....TT.....TC.T.....T.....	977
DNAPTTH	.....G.....C.....G.....AAA.....	980

MAJORITY CCGCGCCAGGGAGGGCGGGCTCCACGGGGGACGAGACCGCTTAXGGCCCTXAGCGAGCTXAGGAGGTG

DNAPTAQ	.....G.....	C..C..G..T.A..A.A.C..C..	G.....	C..	1044
DNAPTFL	T.GG..GT.....	G..CC...T.....	C..G.....G..	T.....	1041
DNAPTTH	...TG.....G.....	G.....GGC..G..A.A..	G.....	C.....	1050

10/145

MAJORITY	[SEQ ID NO:156]	GGGGGXCTCCTGGGCAAGGAGCTGGCGGTTTTGGCCCTGAGGGAGGGGCTXGACCTCXTGCCCGGGGAGG	
DNAPTAQ	[SEQ ID NO:153]	.....G..T.....A.....AG.....C.....A.....T.G.....CC.....C.....	1114
DNAPTFL	[SEQ ID NO:154]	.....AA.....G.....G.....G.....G.....T.C..A.A.....	1111
DNAPTTH	[SEQ ID NO:155]	.....C.....C.....TC.....G..A.....G.....	1120
MAJORITY	ACCGCATGCTCCTGGCTAGCTCCTGGACCCCTCCAACACGACGCGCGGAGGGGTTGCCCGGGGCTACGG		
DNAPTAQ		.....T.....	1184
DNAPTFL		.....G.....T.....T.....T.....	1181
DNAPTTH		.....G.....G.....	1190
MAJORITY	GGGGGAGTGGAGGGAGXGCGGGGGAGCGGGGCTCCTXTCGGAGAGGCTCTTCCXGAAGCTXXXGGAG		
DNAPTAQ		.....G.....G.....T.....GG.....G.....GGC.....GTG..G.	1254
DNAPTFL		.....T.....A.....GG.....G.C.....A..C...AAA....	1251
DNAPTTH		.....C..C.CCC.C.....C..G.....CAT.G.....CGTTA..	1260
MAJORITY	GGGCTTGAGGGGAGGAGGGTCCTTTGGCTTACGAGGAGTGGAGAAAGCGGCTTCCCGGGTCCCTGG		
DNAPTAQ		A.G.....G.....G.....G.....GCT.....	1324
DNAPTFL		.....A...A..A.C.C..G.....G.....G.....GT...	1321
DNAPTTH		.....C.....A.....C.....C.....A.....C.....	1330
MAJORITY	CGCAGATGGAGGGGAGGGGTXCGGGCTGGACGTGGGCTAGCTCGAGGGGCTXTCCCTGGAGGTGGCGGA		
DNAPTAQ		.....G..C.....T...AG....T.G.....C...	1394
DNAPTFL		.....G.....C.....C.....G.....A..C	1391
DNAPTTH		.....GG.....C.....A.....T.....C.T.....	1400

11/145

FIGURE 8E

```

MAJORITY [SEQ ID NO:156] GGAGATCGGGGGGCTGGAGGAGGAGGTCTTCGGGCTGGGGGGGACCCCTTCAAGCTCAACTCGGGGGGAG
1464
DNAPTAQ [SEQ ID NO:153].....GC.....CC.....1464
DNAPTFL [SEQ ID NO:154].....G.G...AG..G.....1461
DNAPTTH [SEQ ID NO:155].....T..G.....1470

MAJORITY GAGCTGGAAAGGCTGCTCTTTGACGAGGCTXGGGCTTCCGGCCCATGGGCAAGACGGAGAAAGACXGGCAAGC
1534
DNAPTAQ .....G.....A.....C.....1534
DNAPTFL .....GC.....G..C..G..T.....G..G..A..1531
DNAPTTH .....TA.....T.G..G.....C.A.....A.....1540

MAJORITY GCTCGACGACGGCGGCGTCTGGAGGGCGCTXGGXGAGGGCGGACGCCCATCGTGGAGAAGATCCTGCAGTA
1604
DNAPTAQ .....G.....C..C.....1604
DNAPTFL .....T.....G..A.....CGG.....1601
DNAPTTH .....G.....A..G.....C...C..1610

MAJORITY CCGGGAGCTCAGCAAGCTCAAGAACACCTACATXGACCGCCTGCCXGXCGCTCGTCCAGCCGAGGAGGGGG
1674
DNAPTAQ .....G...G.....T.....G.A...A.....1674
DNAPTFL .....A.....A.....G.C...G.....A...C...1671
DNAPTTH .....G.G.....C..AAG.....G.....1680

MAJORITY CGGCTCGACAGCGGCTTCAACGACAGCGGCCACGGGGGAGGGCTTAGTAGCTCGGAGCCGCAACCTGC
1744
DNAPTAQ .....A.....T.....G..1744
DNAPTFL ..G.....C.....TGC.....1741
DNAPTTH .....G.....1750

```



MAJORITY [SEQ IDNO:156] AGAAGATCGCGGACCGCGCTGGCCACAGGATCGCGCGCGCGCTTGGTGGCGAGGAGGGXTGGGT

	SEQ ID NO:153	G	T	G	A	C	G	1814
DNAPTAQ	[SEQ ID NO:153]							G
DNAPTFL	[SEQ ID NO:154]							C
DNAPTTH	[SEQ ID NO:155]							T

**MAJORITY** GTTGGTGGCCCTGGAGCTATAGCCAGATAGAGCTCGGGTCTCTGGCCGACCTCTCGGGGACGAGAACCTG

	A.....	.	A.	G.	C.	1884
DNAPIAQ	.G.....T.T..C.....	T.	T.			1881
DNAPIEL	.....			G.	C.	1890
DNAPTHH	.....					

**MAJORITY** ATCCGGGTCTTCGAGGGGAGGGAGATCCACACCCAGAGCGCCAGCTGGATGTTCCGGCGTCCCGCCGGG

[illegible]

**MAJORITY** AGCGCGTGGACCGCGGTGATGGCGGGGGGGGGCCAAAGACCATCAACTTCGGGGTCCCTCTACGGCATGTCCGC

	2024	2021	2030
DNAPIAQ .....	G.		
A.GG.A...T.....		G.	
DNAPIFL .....			
DNAPIH .....			
DNAPTH .....	GG.G.	G.	

**MAJORITY** CCACGGCCTCTCCGAGGAGCTTGCCTACGGAGGCGGTGGCCTTCATTGAGCGCTACTTCCAG

DNAPIAQ	.....A.....T.....	CCA.....	T.....	2094
DNAPTFL	.....GG.....	.....	.....	2091
DNAPTTH	...TA.G.....	.....T.A.....	.....A	2100

MAJORITY [SEQ ID NO:156] AGCTTCGGCAAGGTGCGGGCGCTGGATTGAGAAAGACCCCTGGAGGAGGGCAGGAGCGGGGCTACGTGGAGA

DNAPTAQ [SEQ ID NO:153] ..... 2164  
 DNAPTFL [SEQ ID NO:154] ..... A. .... GG. .... C. .... G. CC. .... T. .... 2161  
 DNAPTTH [SEQ ID NO:155] ..... A. .... A. .... G. .... A. .... C. .... A. .... 2170

MAJORITY CCGTCTTCGGCGCGGGCGCTACGTGCGCGGACCTCAAGCGCGGGTGAAGAGCGTGGCGGAGGGGGGGA

DNAPTAQ ..... G. .... A. .... AG. G. .... C. .... 2234  
 DNAPTFL ..... T. .... C. .... 2231  
 DNAPTTH ..... AA. AA. .... CA. .... C. .... 2240

MAJORITY GCGCATGGCGTTCAACATGCGCGTCCAGGGCACCGCGCGGACCTCATGAAGCTGGCCATGGTGAAGCTC

DNAPTAQ ..... T. .... 2304  
 DNAPTFL ..... G. .... CG. ... T 2301  
 DNAPTTH ..... C. .... 2310

MAJORITY TTGGCGCGGCTXCAGGAAATGGGGCGCAGGATGCTCCTXCAGGTCCAGGAGGCTGGTGGTGGAGGGCGG

DNAPTAQ ..... A. .... GG. .... T. .... 2374  
 DNAPTFL ..... T. .... C. .... TT. G. .... G. .... 2371  
 DNAPTTH ..... G. C. G. .... G. C. .... CC. ... G. .... 2380

MAJORITY CGAAAGAGCGGGGAGGXGGTGGCGCGCTTTGGCCAAAGGAGGTGATGGAGGGGGTCTATCGCGTGGCGGT

DNAPTAQ ..... A. .... A. .... GG. .... CGGC. .... G. .... 2444  
 DNAPTFL ..... G. C. .... AG. ... A. .... GG. .... GAG. ... 2441  
 DNAPTTH ..... C. ... C. .... C. .... A. .... AA. C. .... C. .... 2450

# FIGURE 8H "CEC49B6D"

MAJORITY [SEQ ID NO:150] GCGCGCTGGAGGCTGGAGGCTGGGGATGGGGGAGGACTGGCTCTCGCGCCAAAGGAGTAG

DNAPTAD [SEQ ID NO:153] .....A..... GA

DNAPTFL [SEQ ID NO:154] .....CC.....

DNAPTTH [SEQ ID NO:155] .....T.....GT...

2499  
2496  
2505

FIGURE 9A

MAJORITY [SEQ ID NO:159]MXAML PLFEPKGRVLLVDGHHLAYRTFFALKGLTTSRGEPVQAVYGFASKLLKALKEDG-DAVXVVVFDAK

TAQ PRO [SEQ ID NO:157].RG.....H.....I.....69

TFL PRO [SEQ ID NO:158].V.....V.....68

TTH PRO [SEQ ID NO:159].E.....YK..F.....70

MAJORITY APSFRHEAYEAYKAGRPTPEDFPROLALI KELVDLLGLXRLEVPGYEADDVLATLAKKAEKEGYEVRI L

TAQ PRO GG.....A.....S.....139

TFL PRO V.....F.....R.....138

TTH PRO FT.....140

MAJORITY TADRDLYQLLSDRI AVLHPEGYLI TPAWL WEKYGLRPEQWVDYRALXGDPSPDNLPGVKGI GEKTAXKLLX

TAQ PRO K.....H.....D..A.....T..E.....R...E 209

TFL PRO E...I.....Y.....A.....I.....QR..IR 208

TTH PRO V...V.....H...E.....F...V.....L...K 210

MAJORITY EWGSLLENLLKNLDRVKP-XXREKI XAHMEDLXL SXLSXVRTDLPLEVDFAXRREPDPREGLRAFLERLF

TAQ PRO A.....L...AI...L...D..K..WD.AK.....K.....R.....278

TFL PRO FOH..Q...SL...LQ.G..A.A..RK..Q.H.....GR..T.NL.....277

TTH PRO ENV.....K..L...R..LE..R.....L.QG.....280

MAJORITY GSLLHEFGLLEXPKALEEAPWPPPEGAFVGFVLSRPEPMWAE LALAAARXGRVHRAXDPLXGLRDLKEV

TAQ PRO S.....K.....D.....G.....PE.YKA.....A 348

TFL PRO G...A.....L..SF.....G.WE..L...Q...R.....G. 347

TTH PRO A.AP.....K.....C.D.....A...A..K.....350

MAJORITY	[SEQ ID NO:159]	RGL LAKDLAVLALREGDLXPGDDPML LAYLLDPSNTTPEGVARRYGGEWTE DAGERALLSERLFXNLXX	
TAQ PRO	[SEQ ID NO:157]	S.....G. P.....E.....A.....A.....A...WG	418
TFL PRO	[SEQ ID NO:158]	I.....F. E.....A.....A.....QT. KE	417
TTH PRO	[SEQ ID NO:1]	S.....V.....AH.....HR..LK	420
MAJORITY	RLEGEERLLWLYXEVEKPLSRVLAHMEATGVRLDVAYLQALSLEVAEEI RRLEEEVFRLAGHPFNLSRD		
TAQ PRO	R...R...A.....R.....A.....A.....	488	
TFL PRO	K.....E.....R.....EA. V. Q.....	487	
TTH PRO	K.....H.....L.....	490	
MAJORITY	QLERVLFDELGLPAIGKTEKTGKRSTSAAVLEALREAHPIVEKILOYRELTCLKNTYIDPLPXLVHPRTG		
TAQ PRO	.....S.....D. I.....	558	
TFL PRO	.....DR.....A...K..	557	
TTH PRO	R...L...Q.....H.....V.....S.....	560	
MAJORITY	RLHTRFNQTATATGRLSSDDPNLQNI PVRTPLGQRI RRAFVAEEGWXLVALDYSQIELRVLAHLSGDENL		
TAQ PRO	.....I.....L.....	628	
TFL PRO	.....V...V.....	627	
TTH PRO	.....A...A.....	630	
MAJORITY	IRVFQEGRDIHTQTASWMF GVPPEAVDPLMRRAAKTI NFGVLYGMSAHRLSQELAI PYEEAVAFIERYFQ		
TAQ PRO	E.....R.....Q.....	698	
TFL PRO	S...G.....G...S.....	697	
TTH PRO	K.....V.....	700	

FIGURE 9C

MAJORITY	[SEQ ID NO:159]	SF PKVRAWI EKTLEEGRRRGYVETLFGRRRYVPDLNARVKSUREAAERMAFNMPVOGT AADL MKL AMVKL	768
TAQ PRO	[SEQ ID NO:157]	.....E.....	767
TFL PRO	[SEQ ID NO:158]	.....G.....Y.....R.....	770
TTH PRO	[SEQ ID NO:1]	.....K.....	
MAJORITY FPRLXEMGARM LQVHDELVL EAPKXRAEXVAALAKEVMEGVYPLAVPLEVEVGXGEDWLSAKEX			
TAQ PRO	.....E.....E...A...R.....	.....I.....	833
TFL PRO	.....Q...L.....D...R.....W...Q.....L.....	.....L.....	831
TTH PRO	.....R.....L.....QA...E...A...KA.....M.....	.....G.....	835

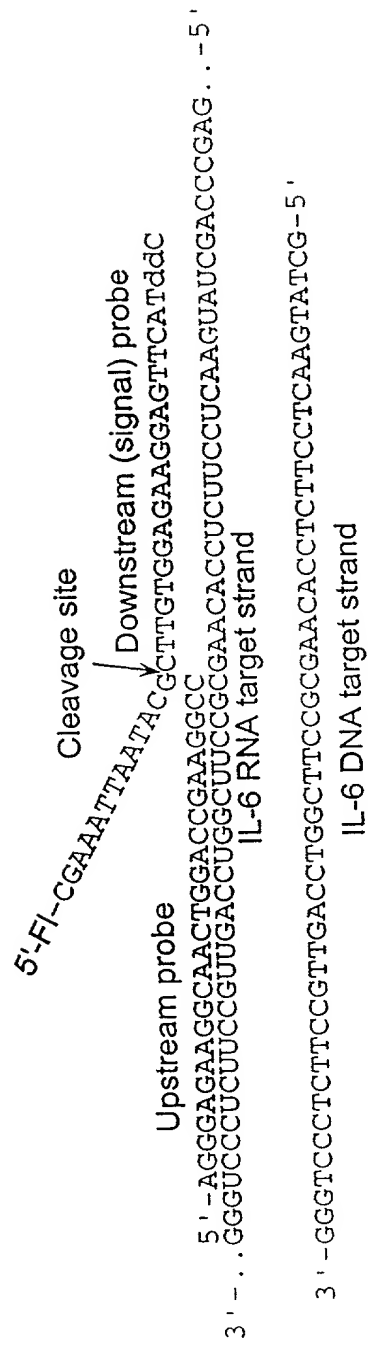


FIGURE 10

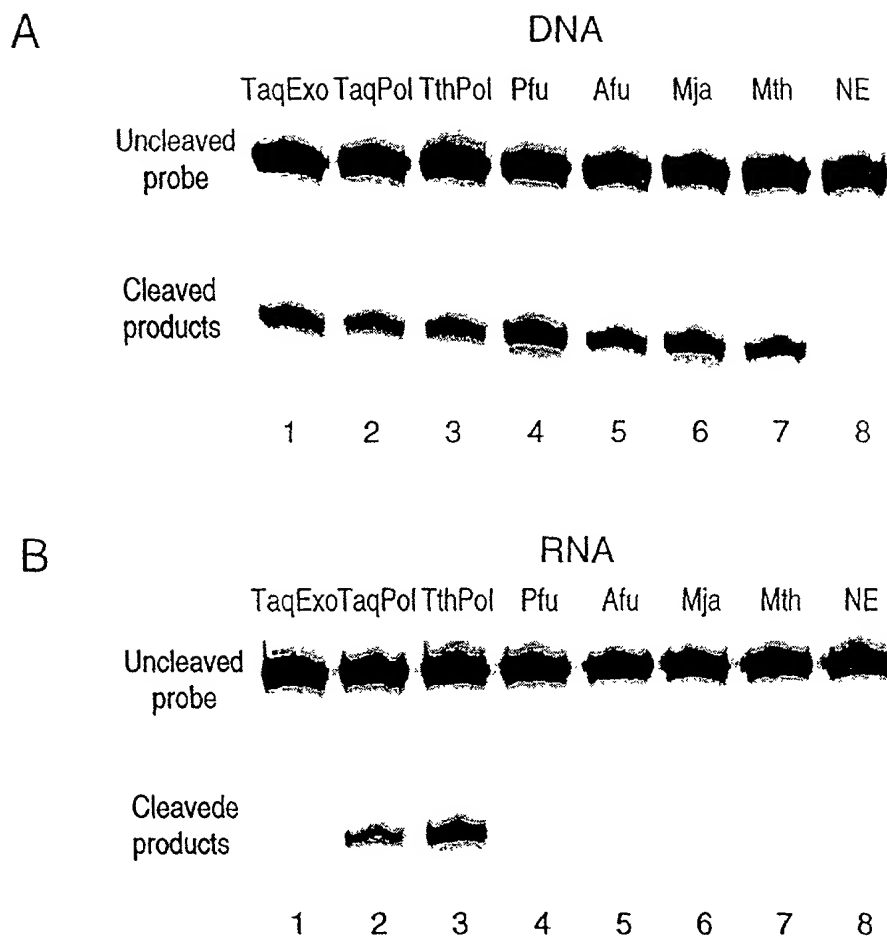


FIGURE 11



1042910-96943360

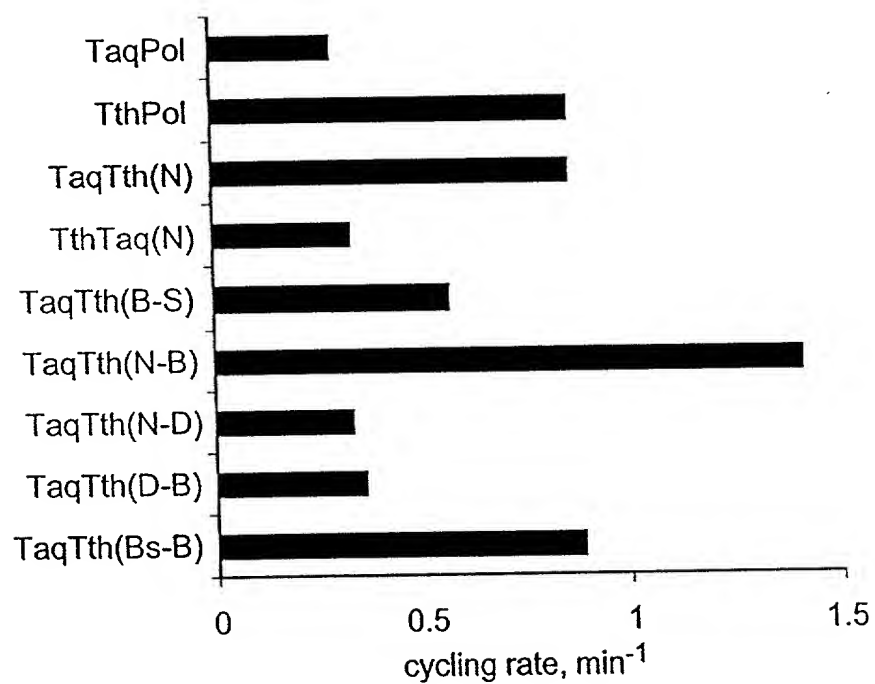


FIGURE 12

21/145

[illegible]

FIGURE 13

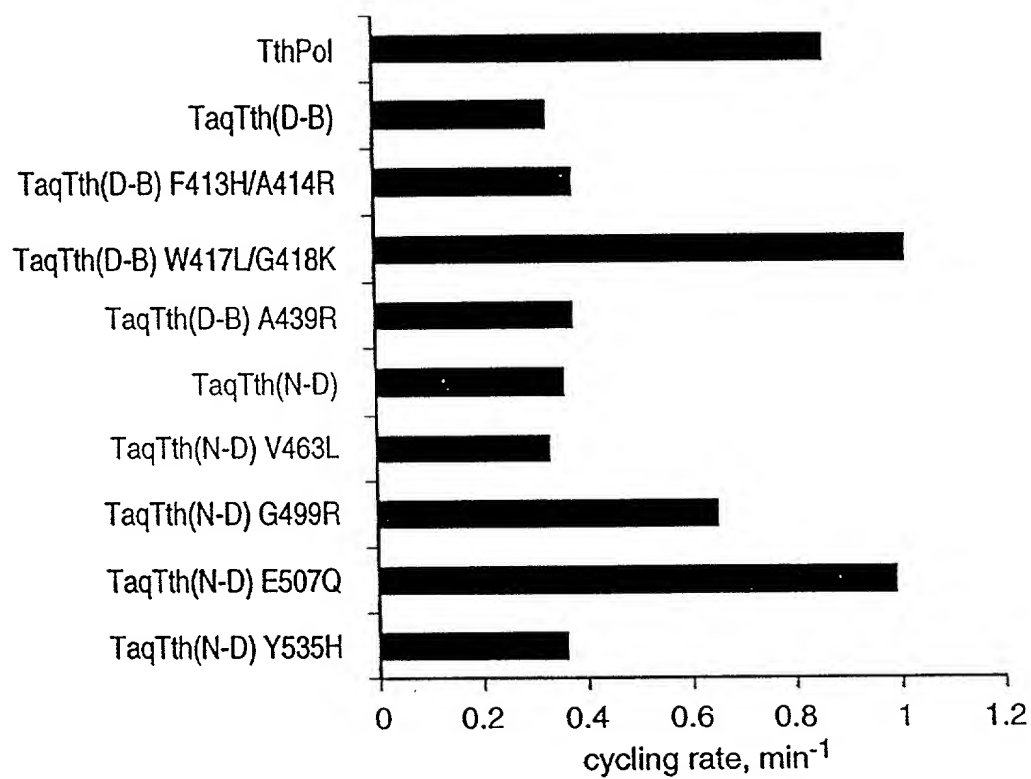


FIGURE 14

9350 9493 9593 9693 9793 9893 9993

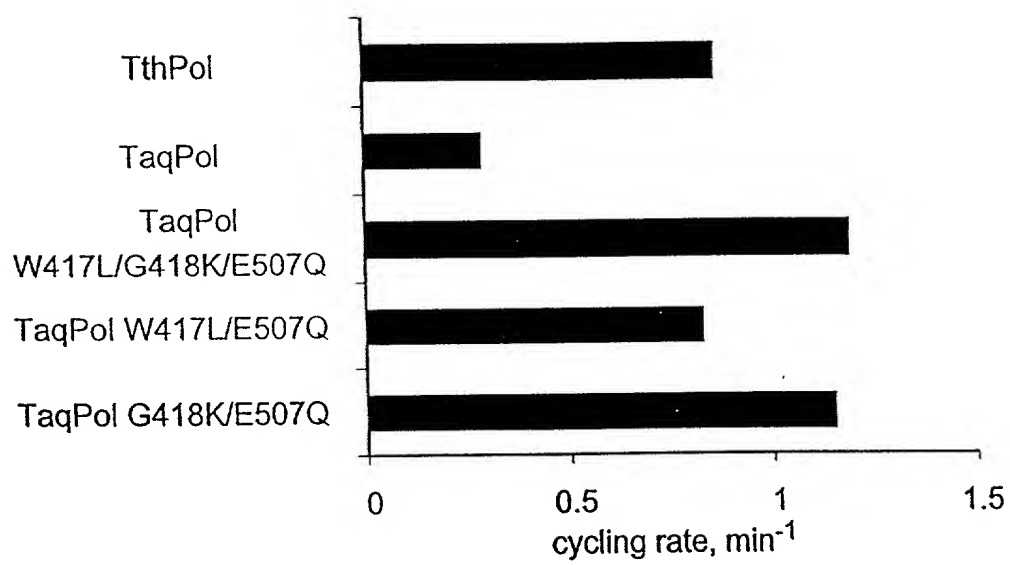


FIGURE 15

24/145

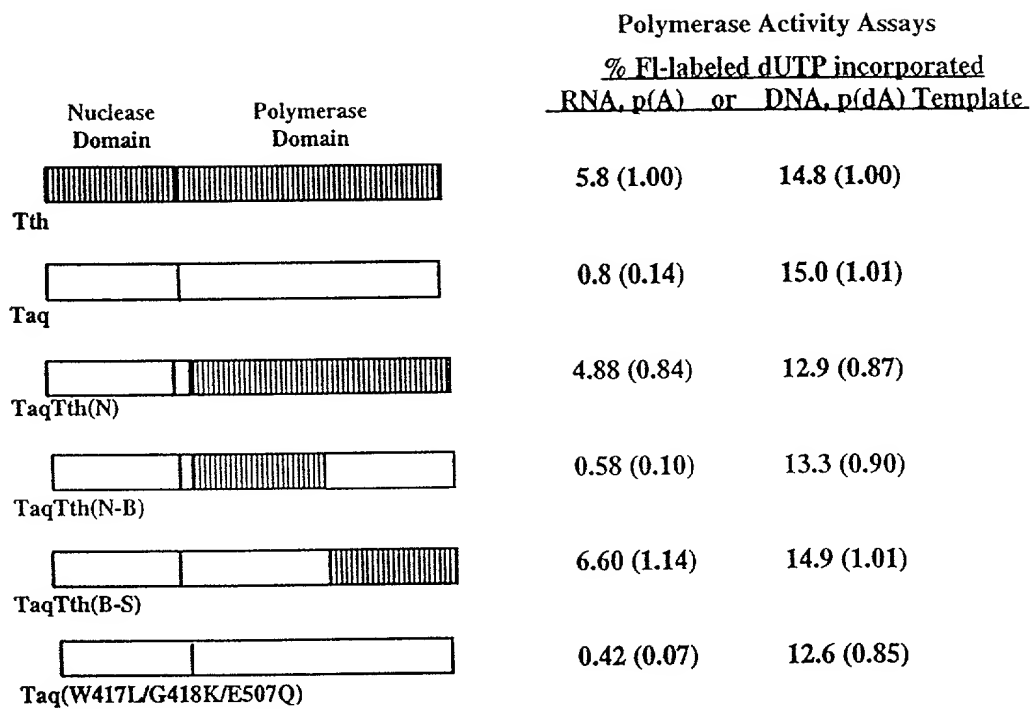


FIGURE 16

25/145



FIGURE 17

(SEQ ID NO:224) ↓

ACGGAACGAGCGTCTTTG

UGCCUUGCUCGCAGAAAGCGACAGAGCGAGCG

↑ (SEQ ID NO: 225)

FL-CGCT cy3 TCTCGCTCGC (SEQ ID NO: 223) ↓

27/145

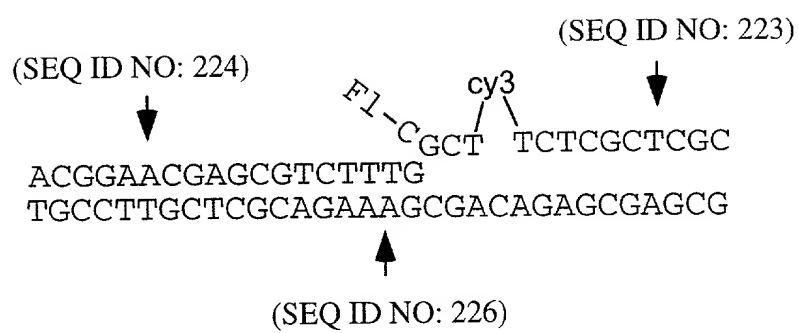


FIGURE 18B



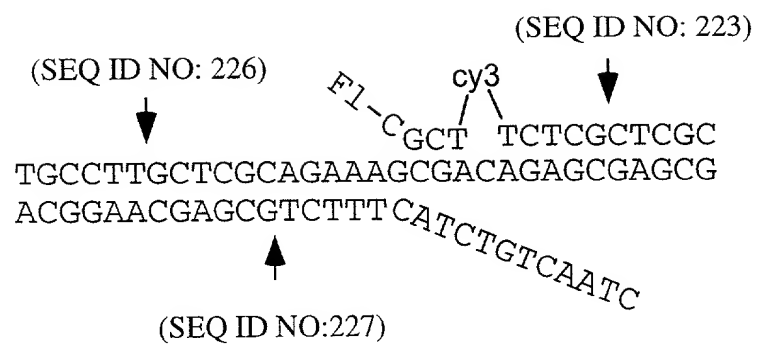


FIGURE 18C

(SEQ ID NO:223)  
 ↓  
 F1-C<sub>GCT</sub> cy3  
 TGCCTTGCTCGCAGAAAGCGACAGAGCGAGCG  
 ↑  
 (SEQ ID NO: 226)

30/145

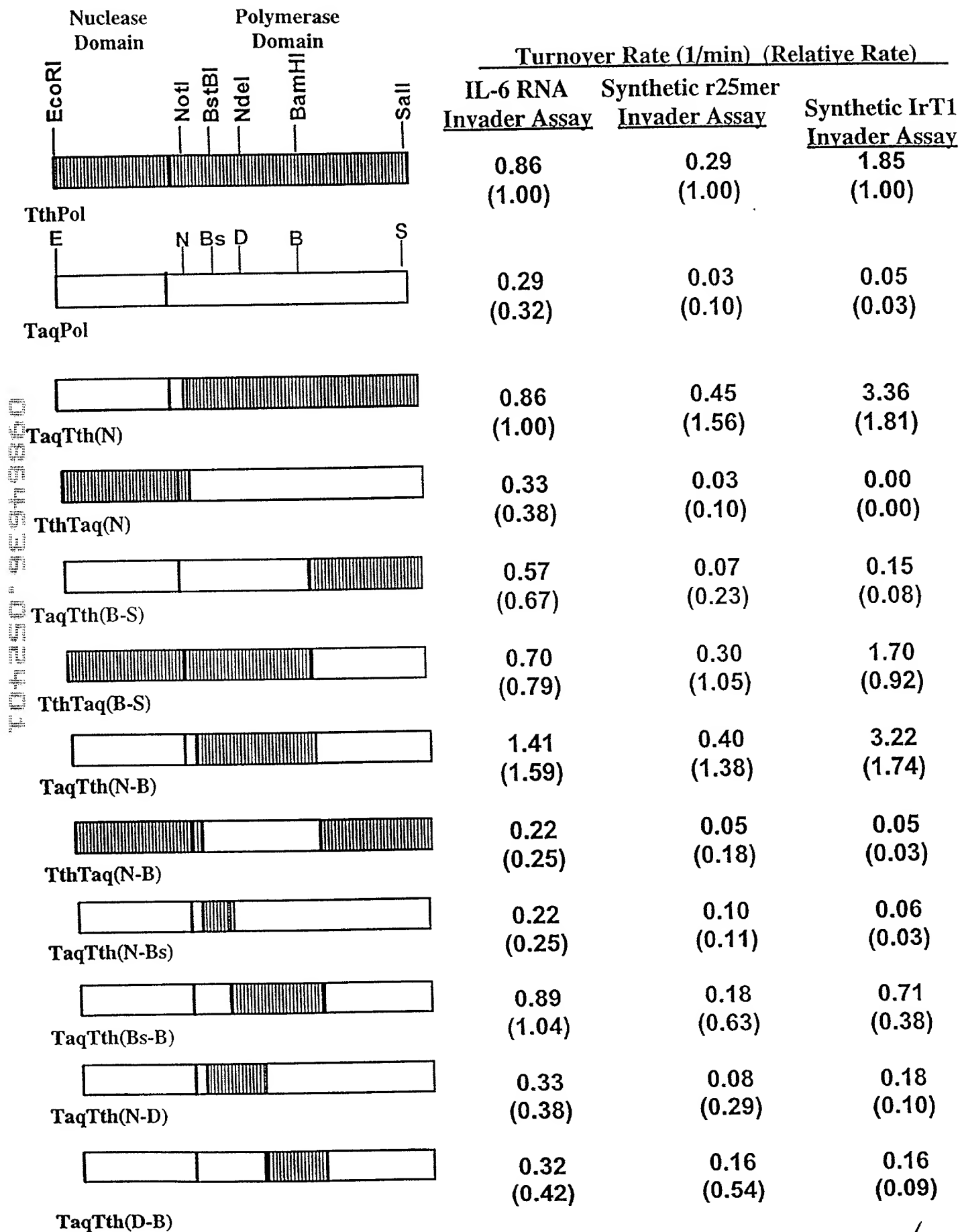


FIGURE 19

31/145

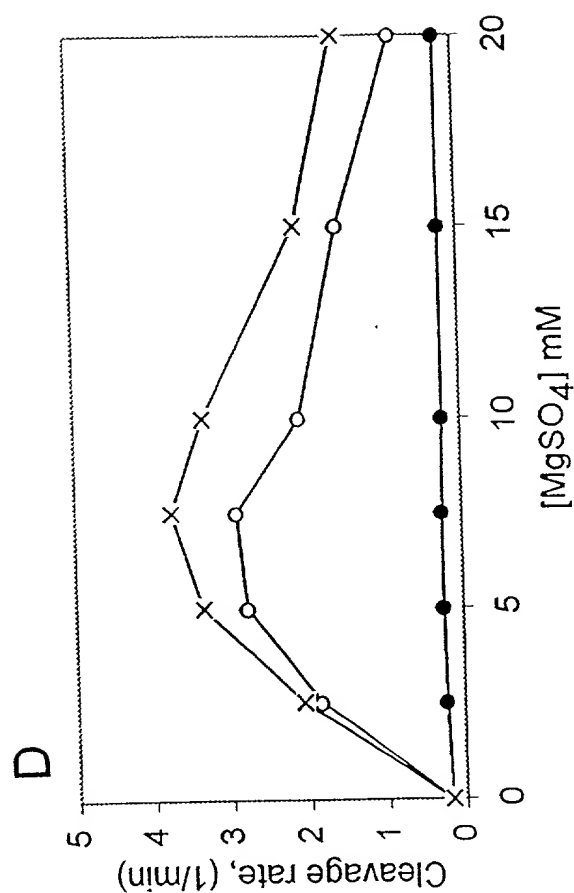
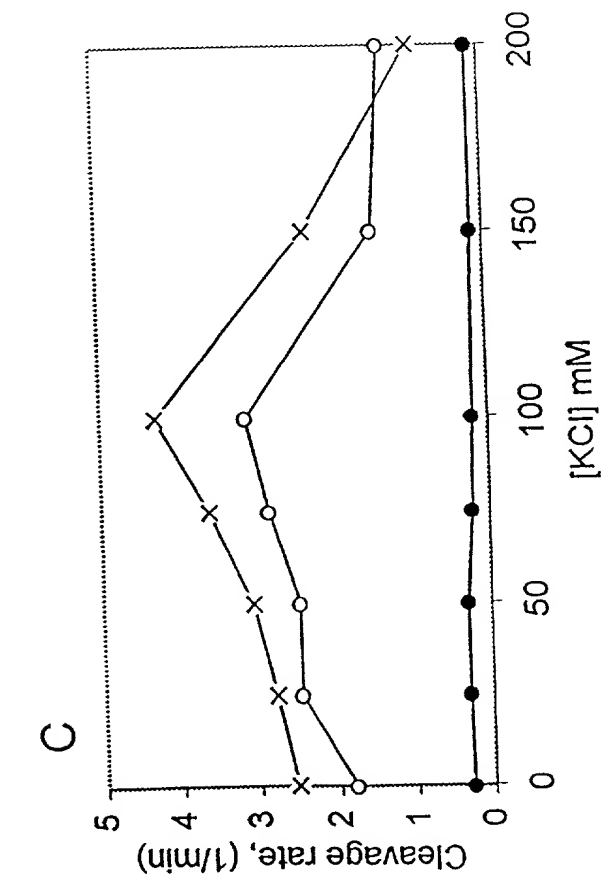
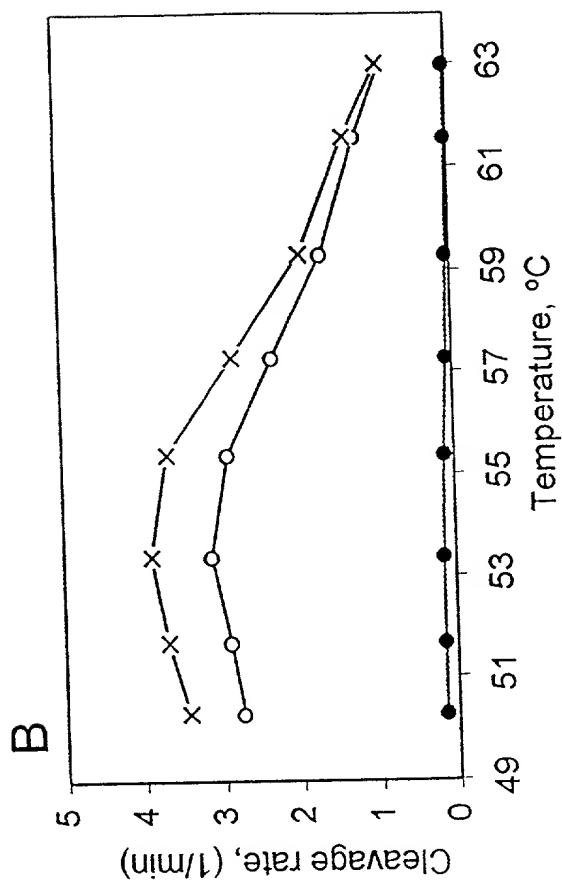
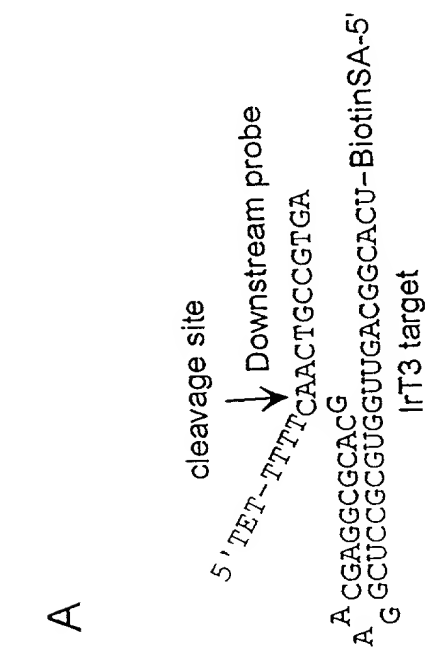


FIGURE 20

32/145

## FIGURE 21

A

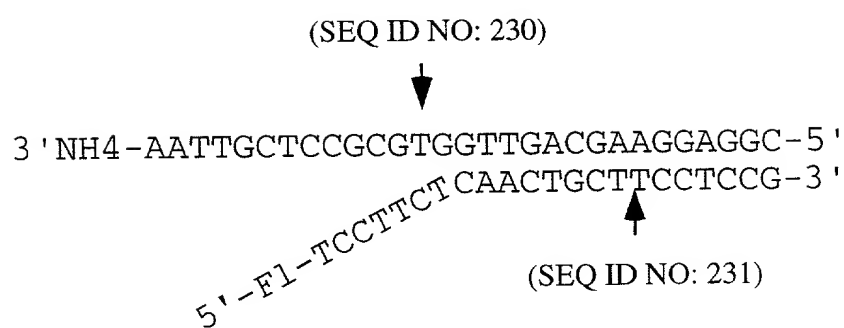
5'-tet-TTTTCAACTGCCGTGA  
A CGAGGCGCACG  
A GCTCCGCGTGGTTGACGGCACT

B

5'-tet-TTTTCAACTGCCGTGA  
A CGAGGCGCACG  
A GCUCCGCGUGGUUGACGGCACU-BiotinSA-5'

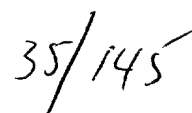
# FIGURE 22

A



B



[illegible]

# FIGURE 24

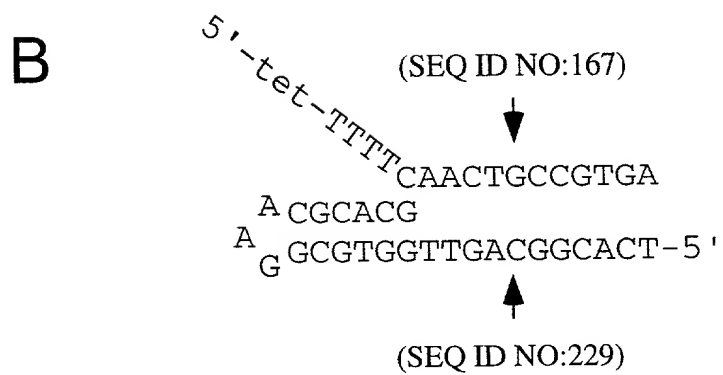
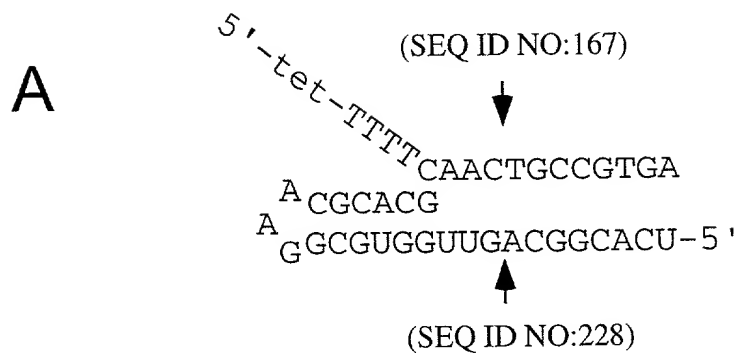




FIGURE 25

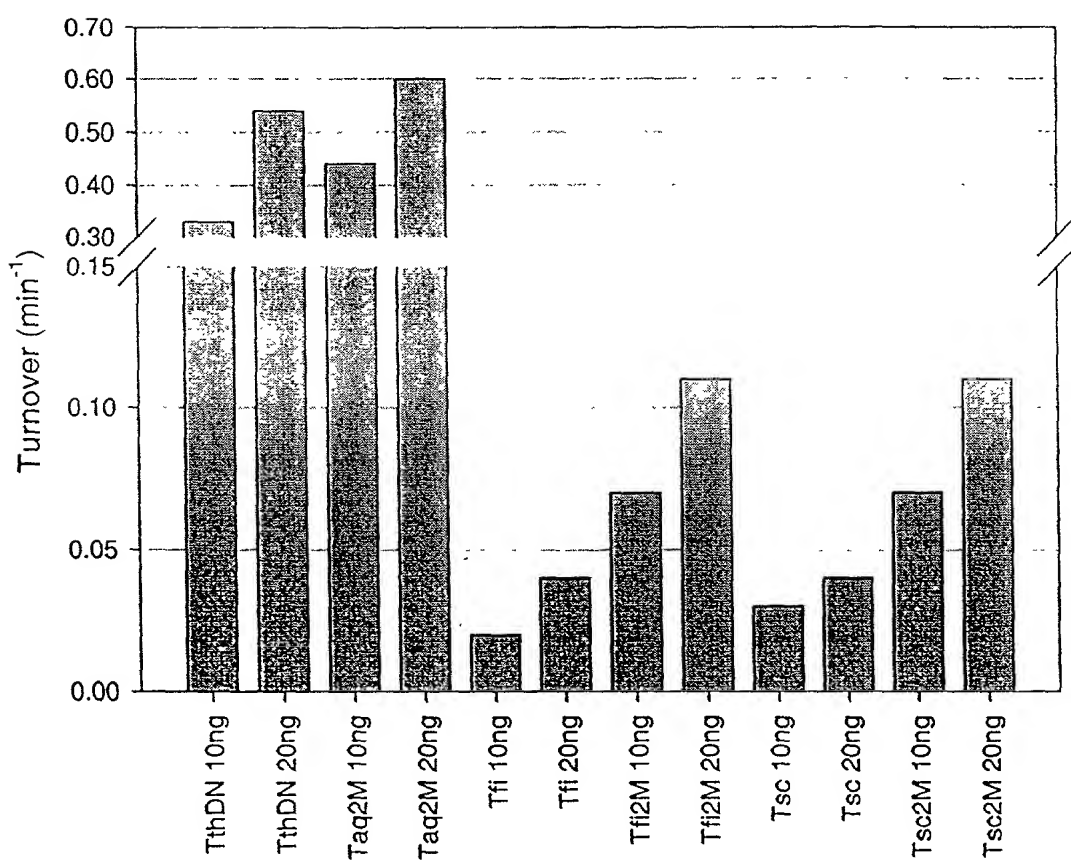


FIGURE 26

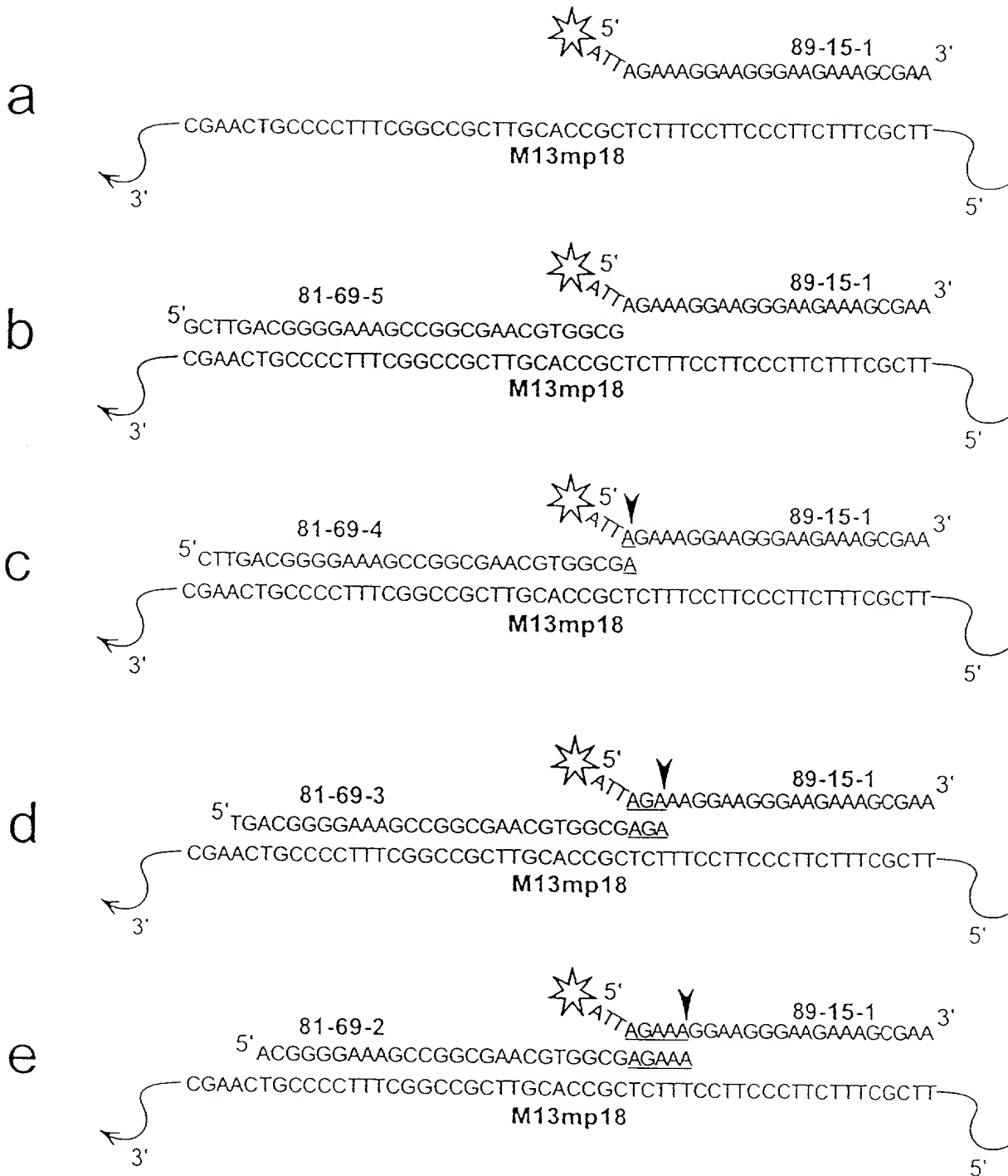


FIGURE 27

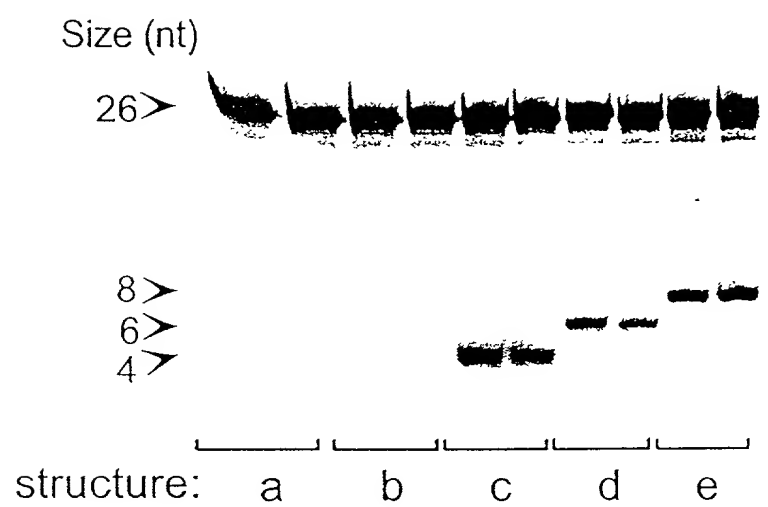
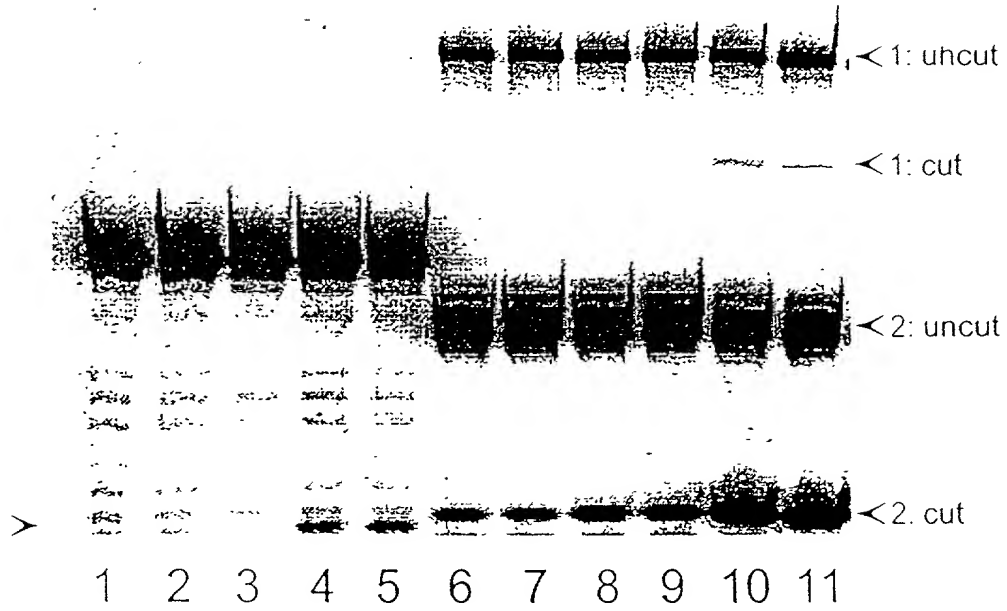
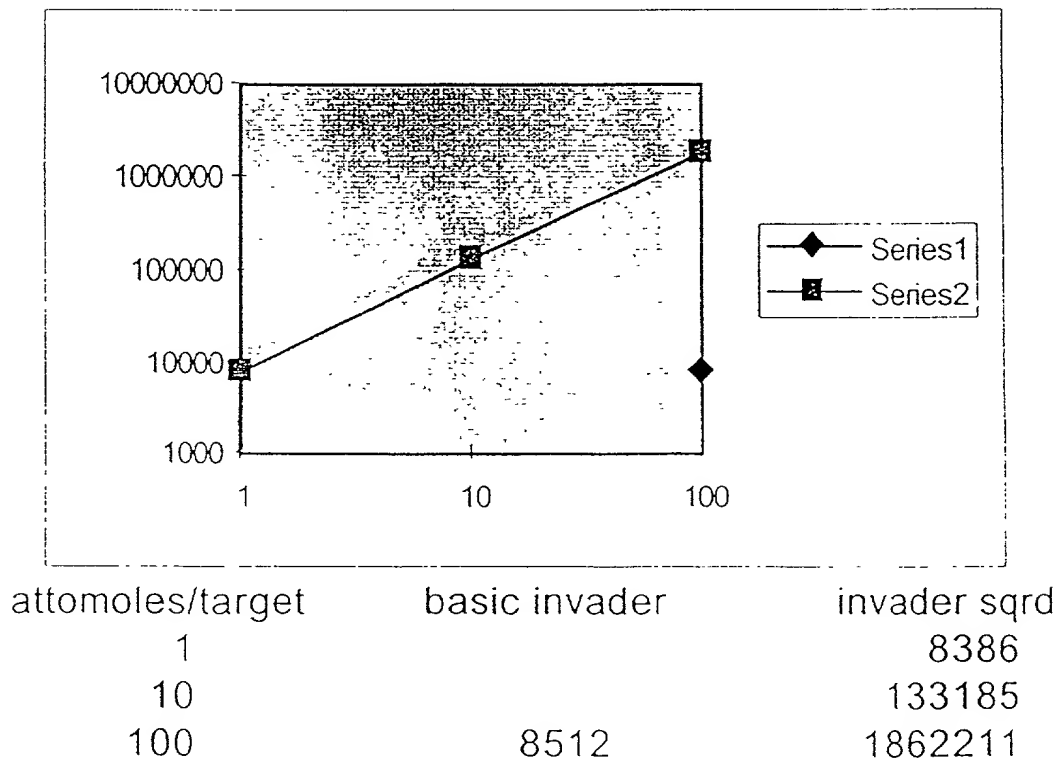


FIGURE 28

a

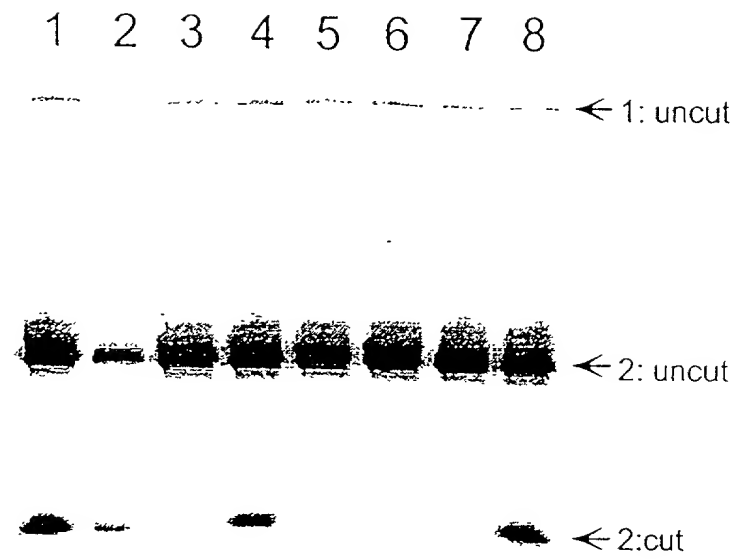


b



40/145

FIGURE 29



**FIGURE 30**

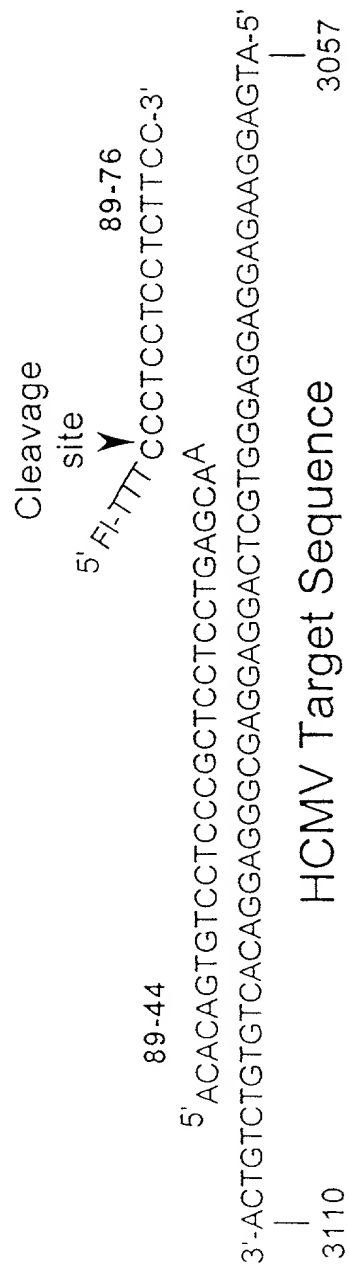


FIGURE 31

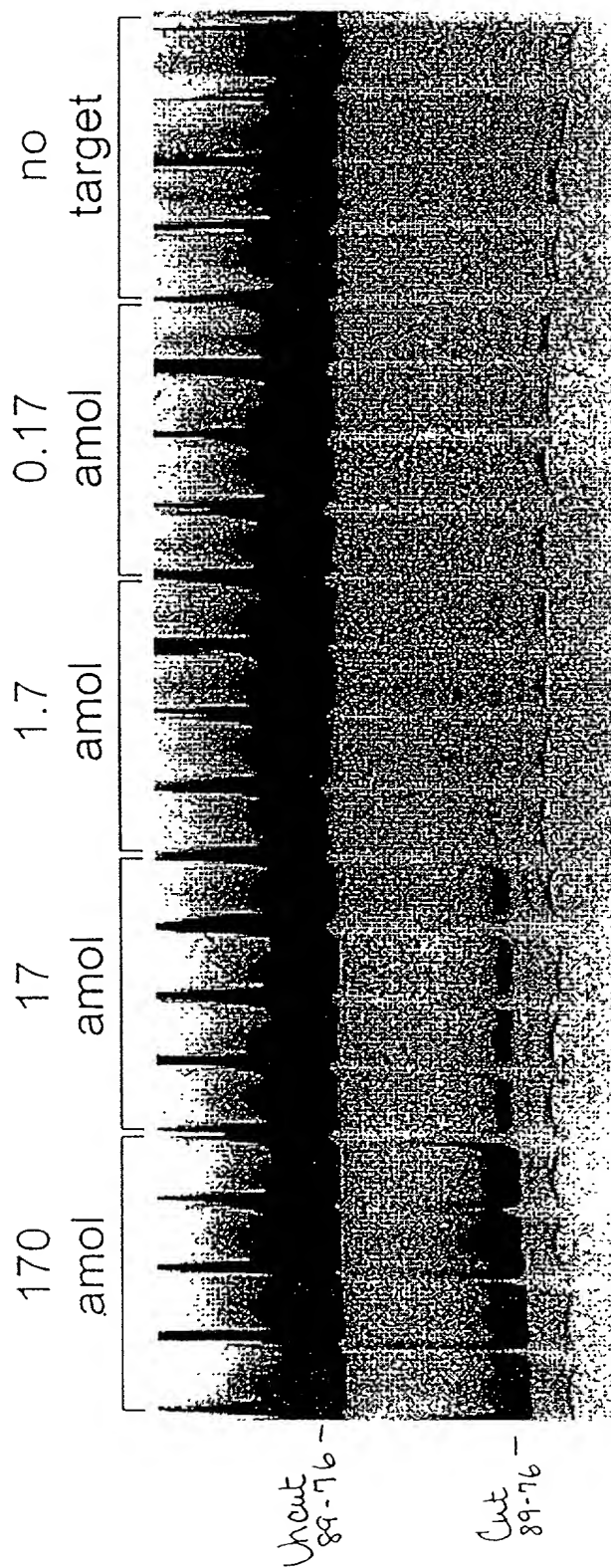
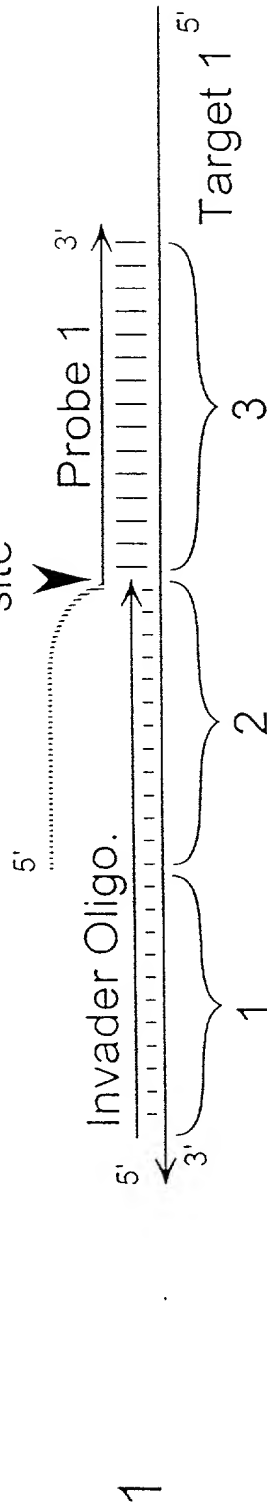


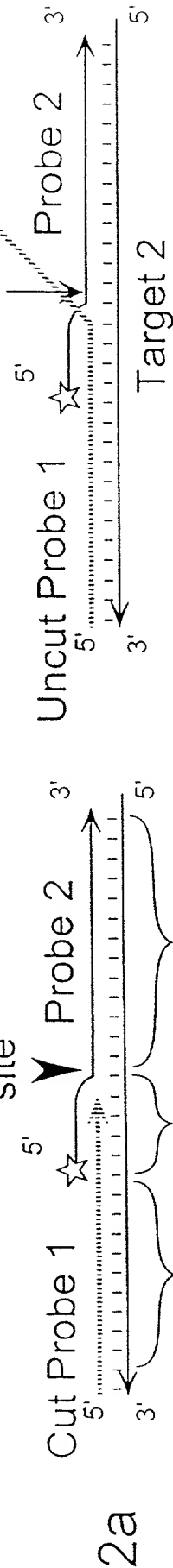
FIGURE 32

Cleavage site



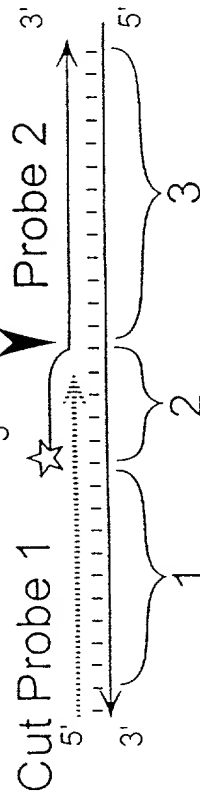
Background cleavage site

Cleavage site



Cleavage site

Uncut Probe 1

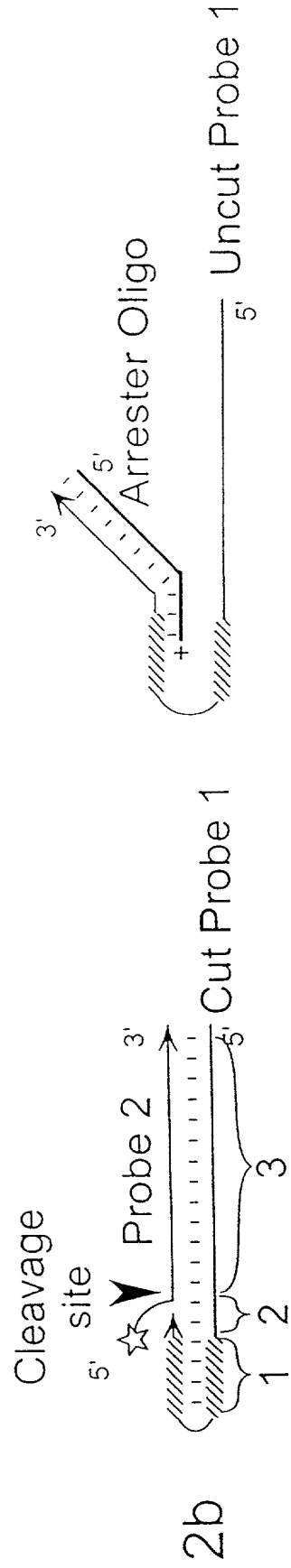
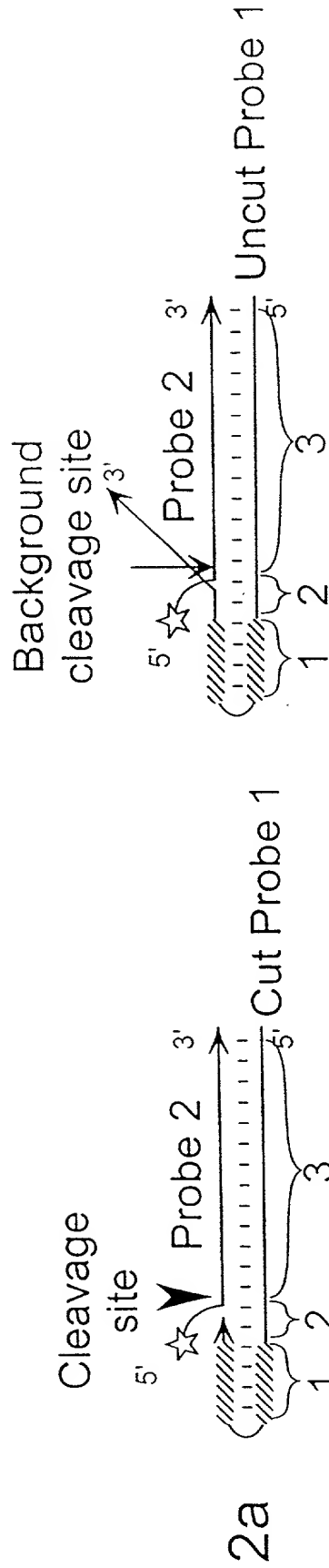
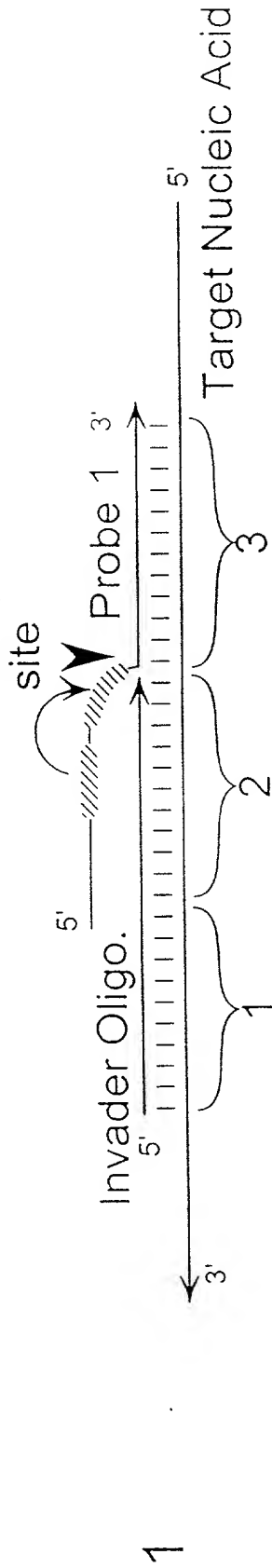


4/4/45



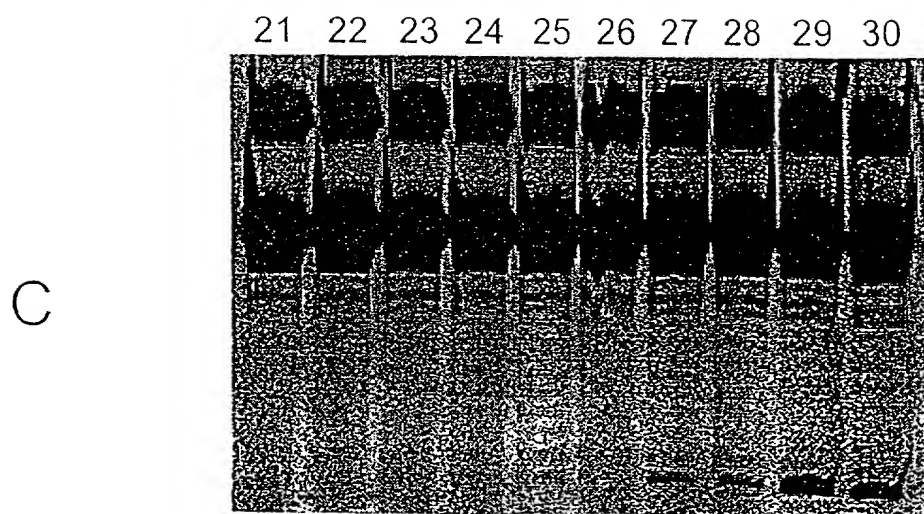
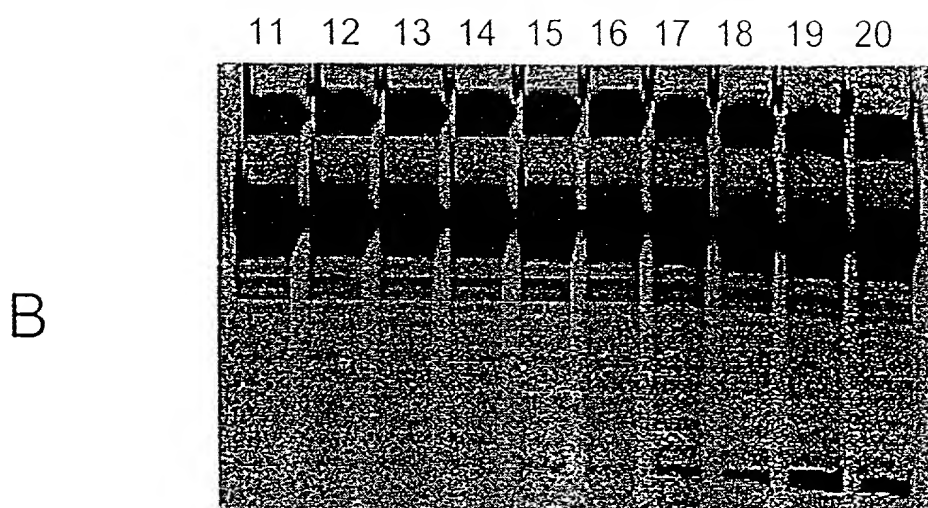
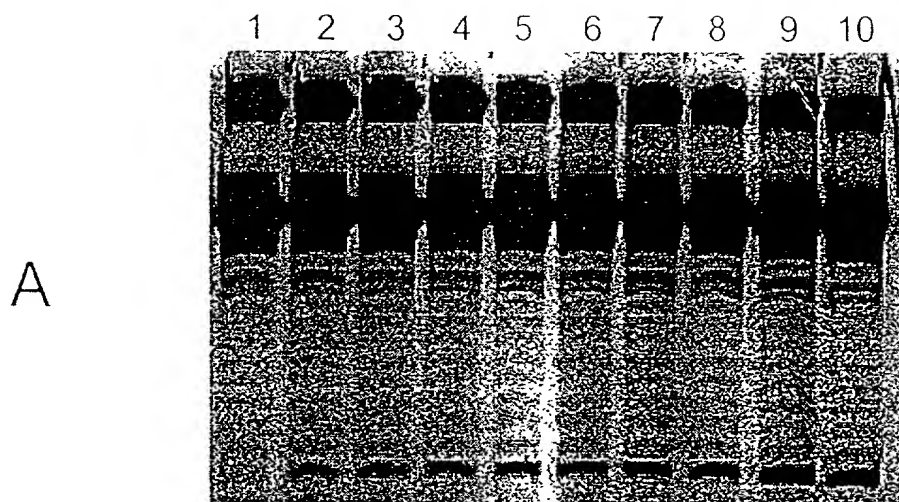
FIGURE 33

Cleavage



45/145

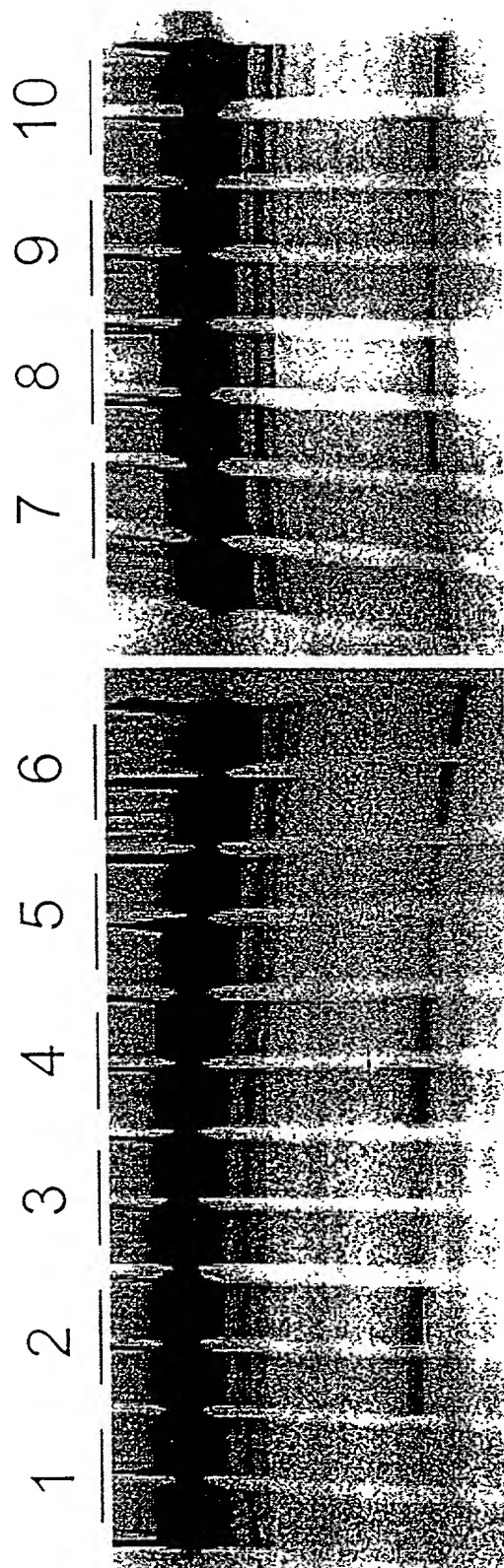
FIGURE 34



46/145

T04250" 9E949360

FIGURE 35A



47/145

FIGURE 35B

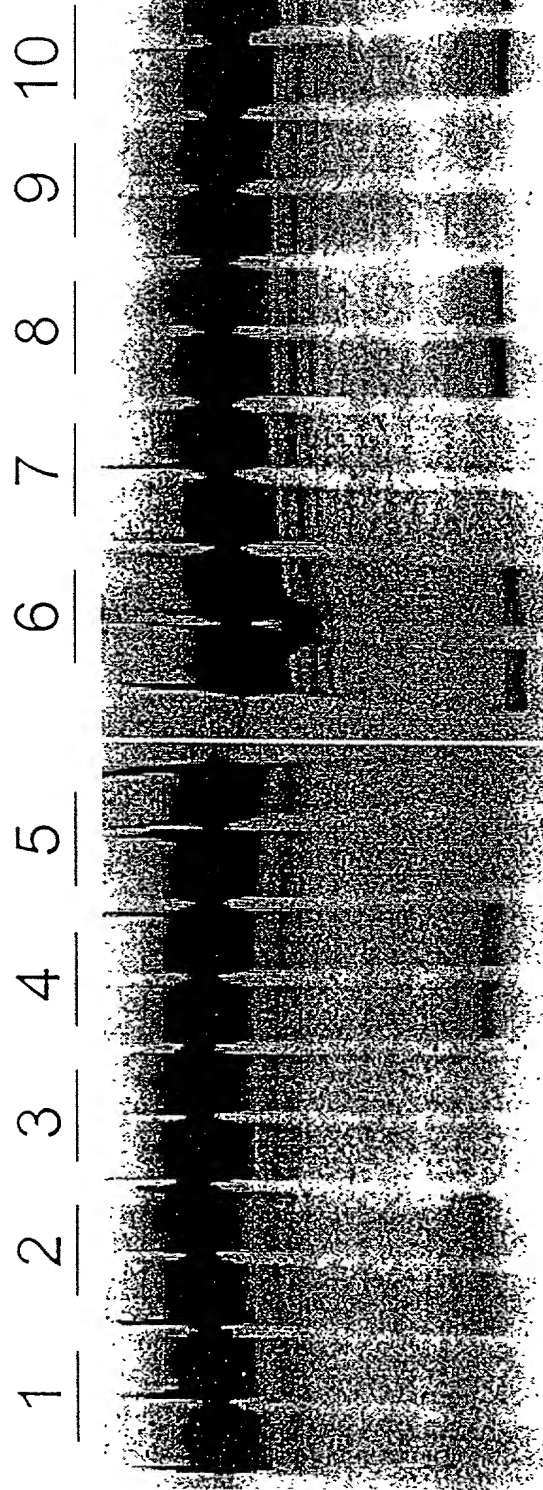


FIGURE 35C

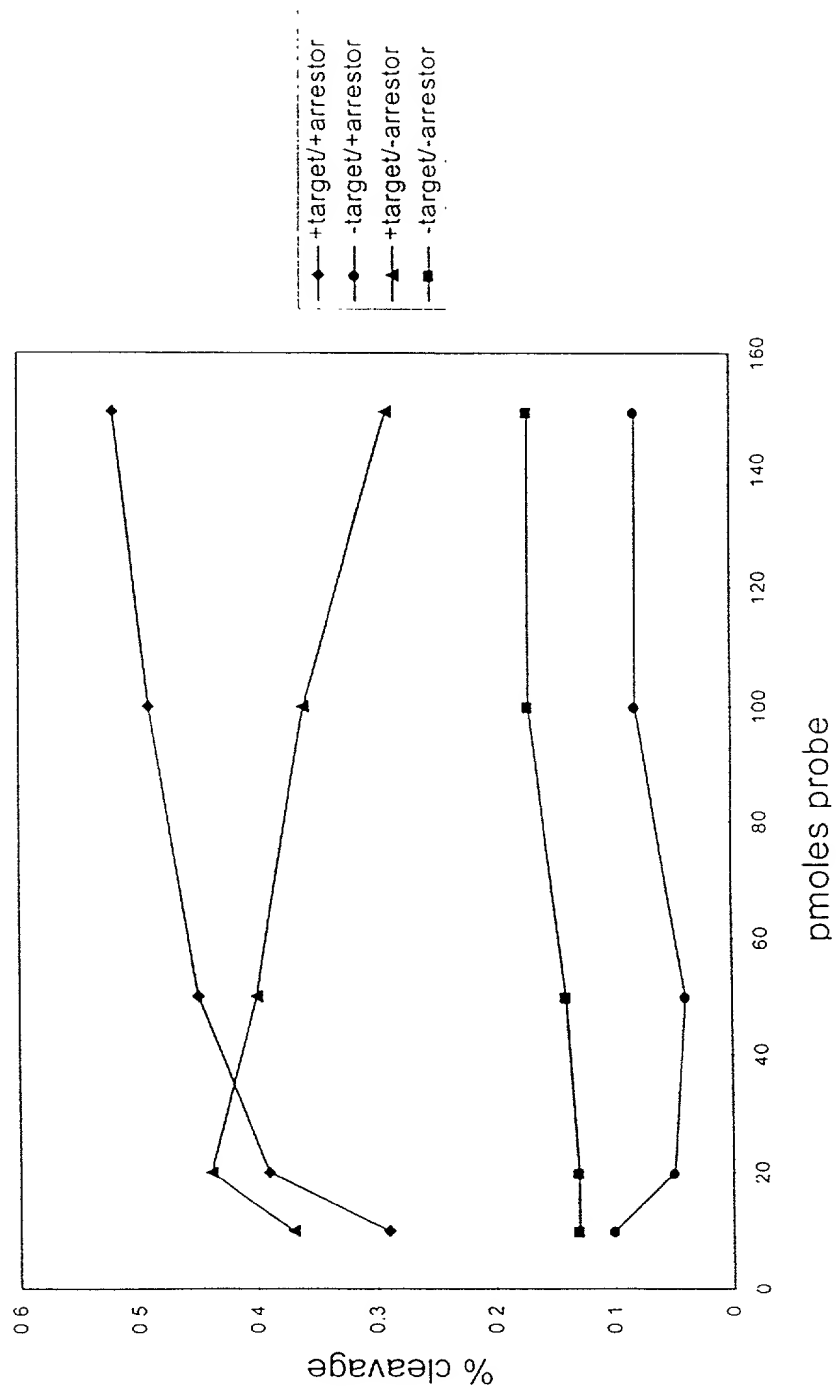


FIGURE 36A

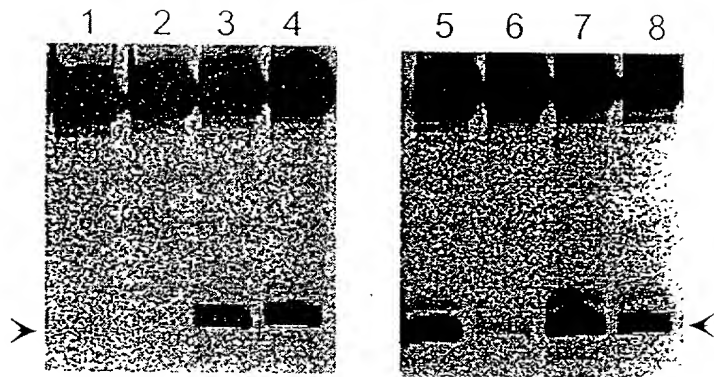
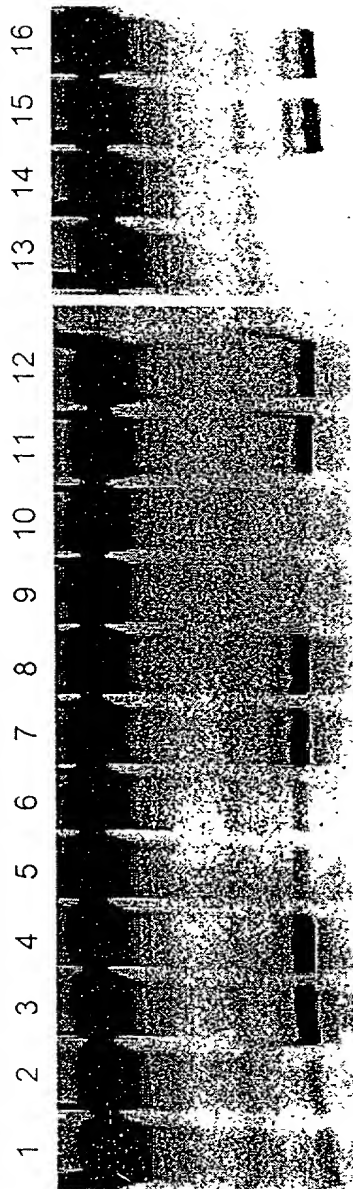


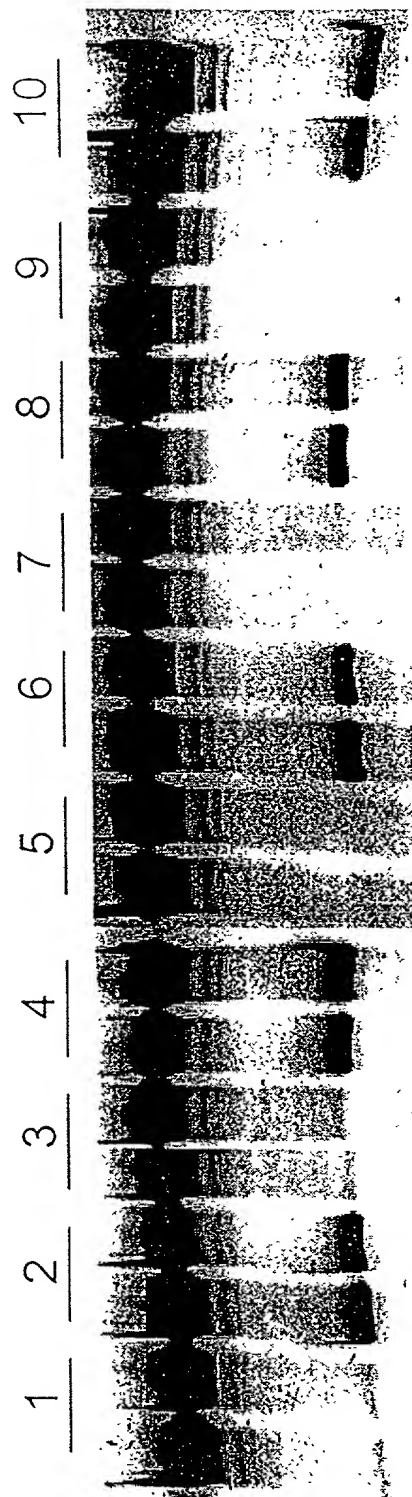
Table 1. Continued	
1.00	1.00
0.99	0.99
0.98	0.98
0.97	0.97
0.96	0.96
0.95	0.95
0.94	0.94
0.93	0.93
0.92	0.92
0.91	0.91
0.90	0.90
0.89	0.89
0.88	0.88
0.87	0.87
0.86	0.86
0.85	0.85
0.84	0.84
0.83	0.83
0.82	0.82
0.81	0.81
0.80	0.80
0.79	0.79
0.78	0.78
0.77	0.77
0.76	0.76
0.75	0.75
0.74	0.74
0.73	0.73
0.72	0.72
0.71	0.71
0.70	0.70
0.69	0.69
0.68	0.68
0.67	0.67
0.66	0.66
0.65	0.65
0.64	0.64
0.63	0.63
0.62	0.62
0.61	0.61
0.60	0.60
0.59	0.59
0.58	0.58
0.57	0.57
0.56	0.56
0.55	0.55
0.54	0.54
0.53	0.53
0.52	0.52
0.51	0.51
0.50	0.50
0.49	0.49
0.48	0.48
0.47	0.47
0.46	0.46
0.45	0.45
0.44	0.44
0.43	0.43
0.42	0.42
0.41	0.41
0.40	0.40
0.39	0.39
0.38	0.38
0.37	0.37
0.36	0.36
0.35	0.35
0.34	0.34
0.33	0.33
0.32	0.32
0.31	0.31
0.30	0.30
0.29	0.29
0.28	0.28
0.27	0.27
0.26	0.26
0.25	0.25
0.24	0.24
0.23	0.23
0.22	0.22
0.21	0.21
0.20	0.20
0.19	0.19
0.18	0.18
0.17	0.17
0.16	0.16
0.15	0.15
0.14	0.14
0.13	0.13
0.12	0.12
0.11	0.11
0.10	0.10
0.09	0.09
0.08	0.08
0.07	0.07
0.06	0.06
0.05	0.05
0.04	0.04
0.03	0.03
0.02	0.02
0.01	0.01

**FIGURE 36B**



51/145

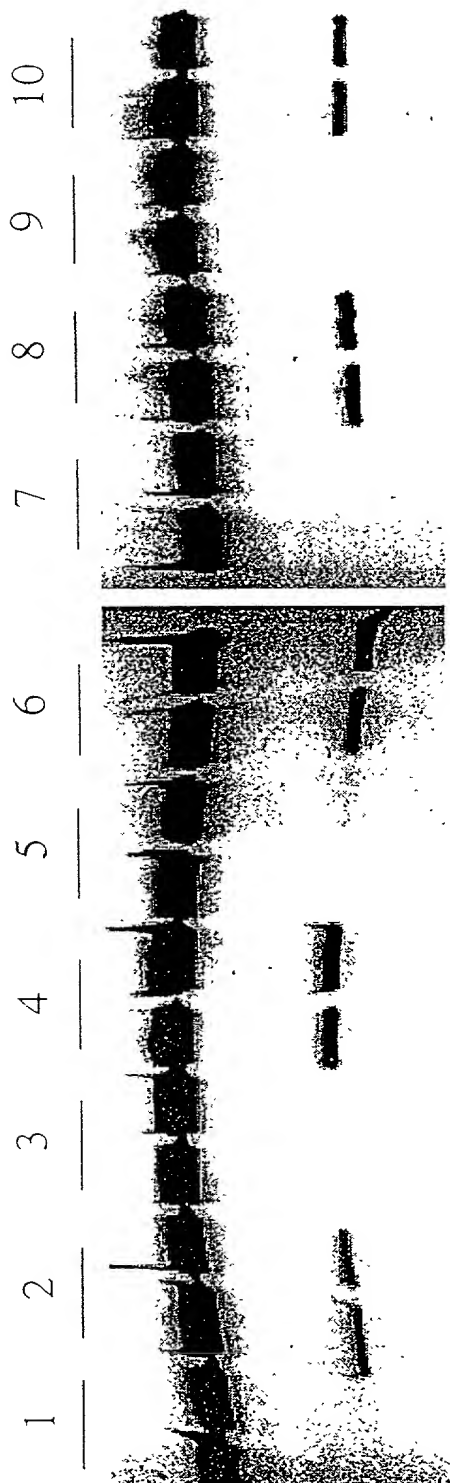
FIGURE 37A





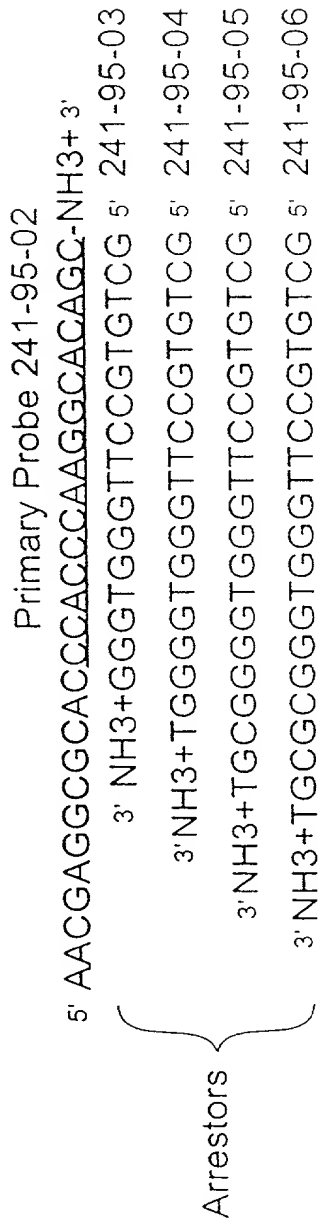
10-11-50 9E949860

FIGURE 37B



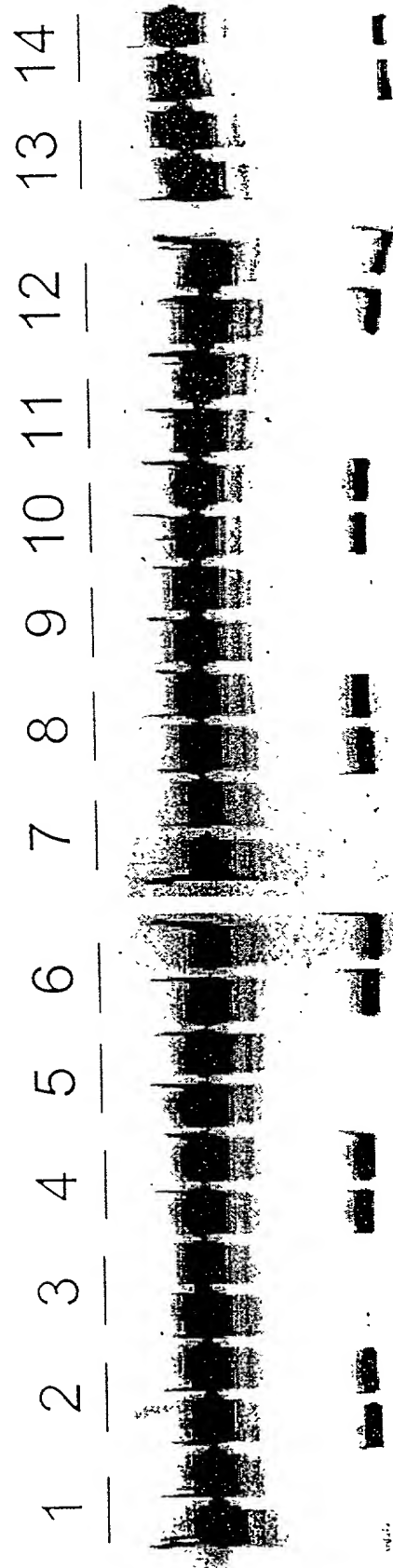
53/145

FIGURE 37C



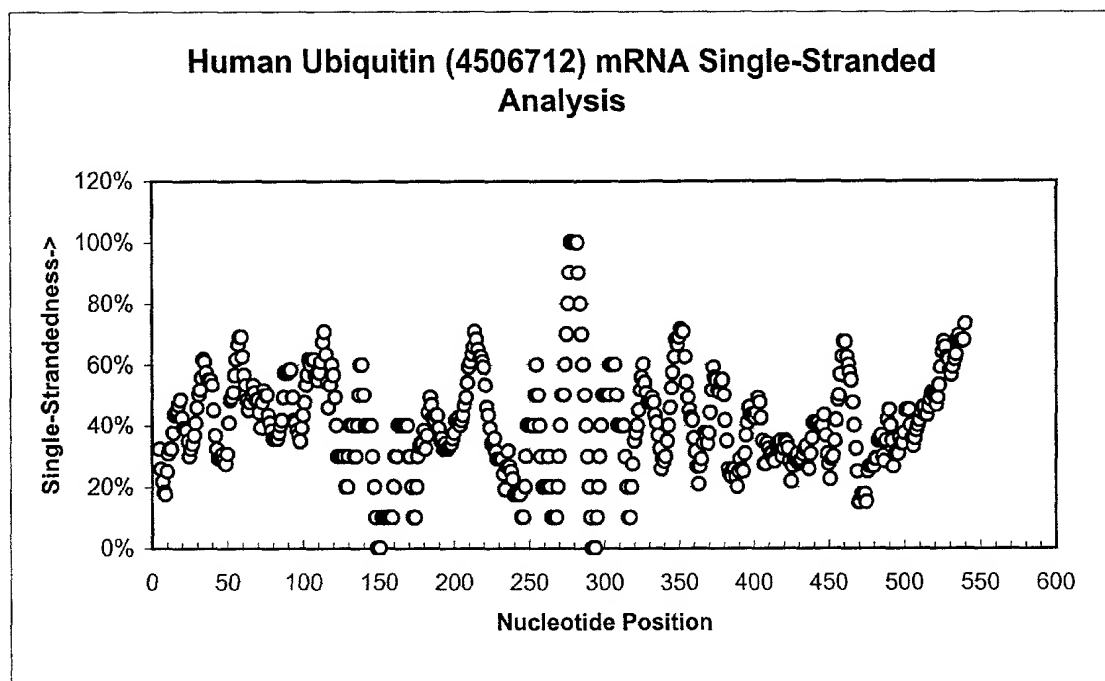
704250" 9E9H9860

FIGURE 38



55/145

Figure 39



56/145

**FIGURE 40**

	1	2	3	4	5	6	7	8	9	10	11	12
A	Negative Control	No Target Control	Sample 1	Sample 1	Sample 9	Sample 9	Sample 17	Sample 17	Sample 25	Sample 25	Sample 33	Sample 33
B	No Target Control	No Target Control	Sample 2	Sample 2	Sample 10	Sample 10	Sample 18	Sample 18	Sample 26	Sample 26	Sample 34	Sample 34
C	Standard 1	Standard 1	Sample 3	Sample 3	Sample 11	Sample 11	Sample 19	Sample 19	Sample 27	Sample 27	Sample 35	Sample 35
D	Standard 2	Standard 2	Sample 4	Sample 4	Sample 12	Sample 12	Sample 20	Sample 20	Sample 28	Sample 28	Sample 36	Sample 36
E	Standard 3	Standard 3	Sample 5	Sample 5	Sample 13	Sample 13	Sample 21	Sample 21	Sample 29	Sample 29	Sample 37	Sample 37
F	Standard 4	Standard 4	Sample 6	Sample 6	Sample 14	Sample 14	Sample 22	Sample 22	Sample 30	Sample 30	Sample 38	Sample 38
G	Standard 5	Standard 5	Sample 7	Sample 7	Sample 15	Sample 15	Sample 23	Sample 23	Sample 31	Sample 31	Sample 39	Sample 39
H	Standard 6	Standard 6	Sample 8	Sample 8	Sample 16	Sample 16	Sample 24	Sample 24	Sample 32	Sample 32	Sample 40	Sample 40

57/145

FIGURE 41

<b>hUbiquitin</b>		
Primary probe	5' -CGC CGA GAT CAC CTT TAC ATT TTC TAT CGT NH2-3'	(SEQ ID NO:169)
INVADER oligonucleotide	5' -CCT TCC TTA TCC TGG ATC TTG GCA -3'	(SEQ ID NO:170)
ARRESTOR oligonucleotide	5'-ACG ATA GAA AAT GTA AAG GTG ATC-3'	(SEQ ID NO:171)
FRET Probe	5'-RED-CTC (Z28) TTC TCA GTG CG-3'	(SEQ ID NO:172)
Secondary target	5'-CGC AGT GAG AAT GAG GTG ATC TCG GCG GT-3'	(SEQ ID NO:173)
<b>m/r Ubiquitin, mouse (288C, 516C, 744C, 972C), rat (247C, 475C, 703C, 931C)</b>		
Primary probe	5'-CCG CCG AGA TCA CGG ATG TTG TAA TCA GAG A-NH2-3'	(SEQ ID NO:174)
INVADER oligonucleotide 1	5'-GTG CAG GGT TGA CTC CTT CTC-3'	(SEQ ID NO:175)
INVADER oligonucleotide 2	5'-GTG CAG GGT TGA CTC TTT CTC-3'	(SEQ ID NO:176)
INVADER oligonucleotide 3	5'-GTG CAG GGT CGA CTC TTT CTC-3'	(SEQ ID NO:177)
ARRESTOR oligonucleotide	5'-TCT CTG ATT ACA ACA TCC GTG ATC T-3'	(SEQ ID NO:178)
FRET Probe	5'-RED-CTC (Z28) TTC TCA GTG CG-3'	(SEQ ID NO:172)
Secondary target	5'-CGC AGT GAG AAT GAG GTG ATC TCG GCG GT-3'	(SEQ ID NO:173)
<b>r/m GAPDH, rat (150C), mouse(166C)</b>		
Primary probe	5'-CGC CGA GAT CAC GTA GTT GAG GTC AAT GA-NH2-3'	(SEQ ID NO:179)
INVADER oligonucleotide	5'-GAA TCA TAC TCG AAC ATG TAG ACC ATC-3'	(SEQ ID NO:180)
ARRESTOR oligonucleotide	5'-TCA TTG ACC TCA ACT ACG TGA TCT-3'	(SEQ ID NO:181)
FRET Probe	5'-RED-CTC (Z28) TTC TCA GTG CG-3'	(SEQ ID NO:172)
Secondary target	5'-CGC AGT GAG AAT GAG GTG ATC TCG GCG GT-3'	(SEQ ID NO:173)
<b>hGAPDH, 516C</b>		
Primary probe	5'-CCG CCG AGA TCA CGA TGA TCT TGA GGC T-NH2-3'	(SEQ ID NO:182)
INVADER oligonucleotide	5'-TGG TGC AGG AGG CAT TGC TC-3'	(SEQ ID NO:183)
ARRESTOR oligonucleotide	5'-CAG CCT CAA GAT TAC CGT GAT CT-3'	(SEQ ID NO:184)
FRET Probe	5'-RED-CTC (Z28) TTC TCA GTG CG-3'	(SEQ ID NO:172)
Secondary target	5'-CGC AGT GAG AAT GAG GTG ATC TCG GCG GT-3'	(SEQ ID NO:173)

58/145

<b>hTGF-<math>\beta</math></b>		
Primary probe	5'-CCG TCA CGC CTC CTC CAC GGC TC -3'	(SEQ ID NO:185)
INVADER oligonucleotide	5'-AGG CGA AAG CCC TCA ATT TCC CA-3'	(SEQ ID NO:186)
Stacker	5'-AAC CAC TGC CGC ACA-3'	(SEQ ID NO:187)
ARRESTOR oligonucleotide	5'-GAG CCG TGG AGG AGG CG-3'	(SEQ ID NO:188)
FRET Probe	5'-FL-CAC-(Z28)-TGC TTC GTG G-3'	(SEQ ID NO:189)
Secondary target	5'-CCA GGA AGC AAG TGG AGG CGT GAC GGT-3'	(SEQ ID NO:190)
<b>hMCP-1</b>		
Primary probe	5'-CCG TCA CGC CTC CTT CGG AGT TTG GG NH2 -3'	(SEQ ID NO:191)
INVADER oligonucleotide	5'-GGG TTG TGG AGT GAG TGT TCA AGT A -3'	(SEQ ID NO:192)
Stacker	NO STACKER	
ARRESTOR oligonucleotide	5'-GGG-AA-CTC-CGA-AGG- AGG-CG-3'	(SEQ ID NO:193)
FRET Probe	5'-FL-CAC-Z28-TGC TTC GTG G-3'	(SEQ ID NO:189)
Secondary target	5'-CCA GGA AGC AAG TGG AGG CGT GAC GGT-3'	(SEQ ID NO:190)
<b>hTNF-<math>\alpha</math></b>		
Primary probe	5'-CCG TCA CGC CTC TCT GAC TGC CA NH2-3'	(SEQ ID NO:194)
INVADER oligonucleotide	5'-TTG TCA CTC GGG GTT CGA GAA GAT GAA-3'	(SEQ ID NO:195)
Stacker	5'-GGG CCA GAG GG-3'	(SEQ ID NO:196)
ARRESTOR oligonucleotide	5'-AGG CAG TCA GAG AGG CG-3'	(SEQ ID NO:197)
FRET Probe	5'-FL-CAC-Z28-TGC TTC GTG G-3'	(SEQ ID NO:189)
Secondary target	5'-CCA GGA AGC AAG TGG AGG CGT GAC GGT-3'	(SEQ ID NO:190)
<b>hIL-6</b>		
Primary probe	5'-CCG TCA CGC CTC CTC ATT GAA TTNH2-3'	(SEQ ID NO:198)
INVADER oligonucleotide	5'-CCA AAA GTC CAG TGA TTT TCA CCA GGC AAG TA -3'	(SEQ ID NO:199)
Stacker	5'-CAG ATT GGA AGC ATC CAT CT-3'	(SEQ ID NO:200)
ARRESTOR oligonucleotide	5'-GAT TCA ATG AGG AGG AGG C-3'	(SEQ ID NO:201)
FRET Probe	5'-FL-CAC-(Z28)-TGC TTC GTG G-3'	(SEQ ID NO:189)
Secondary target	5'-CCA GGA AGC AAG TGG AGG CGT GAC GGT-3'	(SEQ ID NO:190)

## hIL-1 $\beta$

Primary probe  
INVADER oligonucleotide  
Stacker  
ARRESTOR oligonucleotide  
FRET Probe  
Secondary target

5'-CCG TCA CGC CTC CAT CTG TTT AGG NH2-3'  
5'-CAG GTC CTG GAA GGA GCA CTT A-3'  
5'-GCC ATC AGC TTC TTT GTT CTT GTC ATC-3'  
5'-GCC CTA AAC AGA TGG AGG CG-3'  
5'-FL-CAC-(Z28)-TGC TTC GTG G-3'  
5'-CCA GGA AGC AAG TGG AGG CGT GAC GGT-3'

(SEQ ID NO:202)  
(SEQ ID NO:203)  
(SEQ ID NO:204)  
(SEQ ID NO:205)  
(SEQ ID NO:189)  
(SEQ ID NO:190)

## hIL-2

Primary probe  
INVADER oligonucleotide  
Stacker  
ARRESTOR oligonucleotide  
FRET Probe  
Secondary target

5'-CCG TCA CGC CTC CTC CAG TTG TAG NH2 -3'  
5'-AAA ATC ATC TGT AAA TCC AGC AGT AAA TGA -3'  
5'-CTG TGT TTT CTT TGT AGA AC -3'  
5'-CTA CAA CTG GAG GAG GC -3'  
5'-FL-CAC-(Z28)-TGC TTC GTG G-3'  
5'-CCA GGA AGC AAG TGG AGG CGT GAC GGT-3'

(SEQ ID NO:206)  
(SEQ ID NO:207)  
(SEQ ID NO:208)  
(SEQ ID NO:209)  
(SEQ ID NO:189)  
(SEQ ID NO:190)

## hIL-8

Primary probe  
INVADER oligonucleotide  
Stacker  
ARRESTOR oligonucleotide  
FRET Probe  
Secondary target

5'-CCG TCA CGC CTC CTC TCA GTT CT-NH2-3'  
5'-GTG TGG TCC ACT CTC AAT CAA -3'  
5'-TTG ATA AAT TTG GGG TGG AAA GGT TTG GA-3'  
5'-AGA ACT GAG AGG AGG CG-3'  
5'-FL-CAC-(Z28)-TGC TTC GTG G-3'  
5'-CCA GGA AGC AAG TGG AGG CGT GAC GGT-3'

(SEQ ID NO:210)  
(SEQ ID NO:211)  
(SEQ ID NO:619)  
(SEQ ID NO:620)  
(SEQ ID NO:189)  
(SEQ ID NO:190)

## hIL-10

Primary probe  
INVADER oligonucleotide  
Stacker  
ARRESTOR oligonucleotide  
FRET Probe  
Secondary target

5'-AAC GAG GCG CAC CAA ACT CAC TCA T-NH2-3'  
5'-GTC ATG TAG GCT TCT ATG TAG TTG ATG AAG ATG TA-3'  
5'-GGC TTT GTA GAT GCC TTT CTC TTG GA-3'  
5'-ATG AGT GAG TTT GGT GCG-3'  
5'-FL-CAC (Z28)-TGC TTC GTG G-3'  
5'-CCA GGA AGC AAG TGG TGC GCC TCG TTT-3'

(SEQ ID NO:621)  
(SEQ ID NO:622)  
(SEQ ID NO:623)  
(SEQ ID NO:624)  
(SEQ ID NO:189)  
(SEQ ID NO:625)



# hIL-4

Primary probe  
INVADER oligonucleotide  
Stacker  
ARRESTOR oligonucleotide  
FRET Probe  
Secondary target

5'-AAC GAG GCG CAC CTT GGA GGC A-NH2-3'  
5'-AAG GTT TCC TTC TCA GTT GTG TTA-3'  
**5'-GCA AAG ATG TCT GTT ACG GTC AAC TC-3'**  
**5'-TGC CTC CAA GGT GCG C-3'**  
5'-FL-CAC (Z28)-TGC TTC GTG G-3'  
5'-CCA GGA AGC AAG TGG TGC GCC TCG TTT-3'

(SEQ ID NO:626)  
(SEQ ID NO:627)  
(SEQ ID NO:628)  
(SEQ ID NO:629)  
(SEQ ID NO:189)  
(SEQ ID NO:625)

# hIFN-γ

Primary probe  
INVADER oligonucleotide  
Stacker  
ARRESTOR oligonucleotide  
FRET Probe  
Secondary target

5'-AAC GAG GCG CAC CTT CAA AAT GCC TAA-NH2-3'  
5'-TGT CAC TCT CCT CTT TCC AAT TA-3'  
**5'-GAA AAG AGT TCC ATT ATC CGC TAC ATC TG-3'**  
**5'-TTA GGC ATT TTG AAG GTG CGC-3'**  
5'-FL-CAC (Z28)-TGC TTC GTG G-3'  
5'-CCA GGA AGC AAG TGG TGC GCC TCG TTT-3'

(SEQ ID NO:630)  
(SEQ ID NO:631)  
(SEQ ID NO:632)  
(SEQ ID NO:633)  
(SEQ ID NO:189)  
(SEQ ID NO:625)

### hCYP 1A2, 1193G

Primary probe  
INVADER oligonucleotide  
Stacker  
ARRESTOR oligonucleotide  
FRET Probe  
Secondary target

5'-AAC GAG GCG CAC CGT TGT GTC CC-NH2-3'  
5'-**GGG** ATG TAG AAG CCA TTC AGA-3'  
5'-TTG TTG TGC TGT GGG GGA TG-3'  
5'-**GGG ACA CAA CCG TGC GC-3'**  
5'-FL-CAC (Z28) TGC TTC GTG G-3'  
5'-CCA GGA AGC AAG TGG TGC GCC TCG **TTT-3'**

(SEQ ID NO:634)  
(SEQ ID NO:635)  
(SEQ ID NO:636)  
(SEQ ID NO:637)  
(SEQ ID NO:189)  
(SEQ ID NO:625)

### hCYP 2B6, 343G

Primary probe  
INVADER oligonucleotide  
Stacker  
ARRESTOR oligonucleotide  
FRET Probe  
Secondary target

5'- CCG TCA CGC CTC CAC CAT ATC CC-NH2-3'  
5'-CCA GCG GTT TCC ATT GGC AAA GAT CAA-3'  
5'-**CGG AAG AAT GGG TCG ACC ATG-3'**  
5'-**GGG ATA TGG TGG AGG CG-3'**  
5'-FL-CAC (Z28) TGC TTC GTG G-3'  
5'-CCA GGA AGC AAG TGG AGG CGT GAC **GGT-3'**

(SEQ ID NO:638)  
(SEQ ID NO:639)  
(SEQ ID NO:640)  
(SEQ ID NO:641)  
(SEQ ID NO:189)  
(SEQ ID NO:190)

### hCYP 2C19, 223G

Primary probe  
INVADER oligonucleotide  
Stacker  
ARRESTOR oligonucleotide  
FRET Probe  
Secondary target

5'-AAC GAG GCG CAC CGT TCC AGG C-NH2-3'  
5'-CAT ATC CAT GCA GCA CCA CCA TGA-3'  
5'-CAA AAT ACA GAG TGA ACA CAG GGC C-3'  
5'-**GCC TGG AAC GGT GCG C-3'**  
5'-FL-CAC (Z28) TGC TTC GTG G-3'  
5'-CCA GGA AGC AAG TGG TGC GCC TCG **TTT-3'**

(SEQ ID NO:642)  
(SEQ ID NO:643)  
(SEQ ID NO:644)  
(SEQ ID NO:645)  
(SEQ ID NO:189)  
(SEQ ID NO:625)

### hCYP 2C9, 1554T

Primary probe  
INVADER oligonucleotide  
Stacker  
ARRESTOR oligonucleotide  
FRET Probe  
Secondary target

5'-CCG TCA CGC CTC ATG GAT AAT GCC C-NH2-3'  
5'-CAG GTG AGA AAA GGC ATT ACA GAT AGT GAA AGC-3'  
5'-CAG AGG AAA GAG AGC TGC AGG G-3'  
5'-**GGG CAT TAT CCA TGA GGC G-3'**  
5'-FL-CAC (Z28) TGC TTC GTG G-3'  
5'-CCA GGA AGC AAG TGG AGG CGT GAC **GGT-3'**

(SEQ ID NO:646)  
(SEQ ID NO:647)  
(SEQ ID NO:648)  
(SEQ ID NO:649)  
(SEQ ID NO:189)  
(SEQ ID NO:190)

### hCYP 2D6, 1316G

Primary probe  
INVADER oligonucleotide  
Stacker  
ARRESTOR oligonucleotide  
FRET Probe  
Secondary target

5'-CCG TCA CGC CTC CCT GCT GAG AAA-NH2-3'  
5'-CCC GAG GCA TGC ACG GCG GA-3'  
5'-GGC AGG AAG GCC TCC-3'  
5'-TTT CTC AGC AGG GAG GCG-3'  
5'-FL-CAC (Z28) TGC TTC GTG G-3'  
5'-CCA GGA AGC AAG TGG AGG CGT GAC GGT-3'

(SEQ ID NO:650)  
(SEQ ID NO:651)  
(SEQ ID NO:652)  
(SEQ ID NO:653)  
(SEQ ID NO:189)  
(SEQ ID NO:190)

### hCYP 3A4, 309C

Primary probe  
INVADER oligonucleotide  
Stacker  
ARRESTOR oligonucleotide  
FRET Probe  
Secondary target

5'-CCG TCA CGC CTC GCC CCA CA-NH2-3'  
5'-CAG CAC AGG CTG TTG ACC ATC ATA AAA C-3'  
5'-CTT TTC CAT ACT TTT TAT GAC ATT C-3'  
5'-TGT GGG GCG AGG CG-3'  
5'-FL-CAC (Z28) TGC TTC GTG G-3'  
5'-CCA GGA AGC AAG TGG AGG CGT GAC GGT-3'

(SEQ ID NO:654)  
(SEQ ID NO:655)  
(SEQ ID NO:656)  
(SEQ ID NO:657)  
(SEQ ID NO:189)  
(SEQ ID NO:190)

### hCYP 3A5 v2, 323T

Primary probe  
INVADER oligonucleotide  
Stacker  
ARRESTOR oligonucleotide  
FRET Probe  
Secondary target

5'-AAC GAG GCG CAC AGT TGA CCT TC-NH2-3'  
5'-GTG ATG GCC AGC ACA GGG C-3'  
5'-ATA CGT TCC CCA CAT TTT TC-3'  
5'-TGA AGG TCA ACT GTG CGC-3'  
5'-FL-CAC (Z28) TGC TTC GTG G-3'  
5'-CCA GGA AGC AAG TGG TGC GCC TCG TTT-3'

(SEQ ID NO:658)  
(SEQ ID NO:659)  
(SEQ ID NO:660)  
(SEQ ID NO:661)  
(SEQ ID NO:189)  
(SEQ ID NO:625)

### hCYP 3A7, 231C

Primary probe  
INVADER oligonucleotide  
Stacker  
ARRESTOR oligonucleotide  
FRET Probe  
Secondary target

5'-AAC GAG GCG CAC GTC ATA AAT ACC CC-NH2-3'  
5'-GCC AGC ATA GGC TGT TGA CAC-3'  
5'-AGA CTT TTC TAT ACT TTT TAT AAC ATT C-3'  
5'-GGG GTA TTT ATG ACG TGC GC-3'  
5'-FL-CAC (Z28) TGC TTC GTG G-3'  
5'-CCA GGA AGC AAG TGG TGC GCC TCG TTT-3'

(SEQ ID NO:662)  
(SEQ ID NO:663)  
(SEQ ID NO:664)  
(SEQ ID NO:665)  
(SEQ ID NO:189)  
(SEQ ID NO:625)

## h/rCYP 1A1 (human: 937, rat 863G)

Primary probe  
INVADER oligonucleotide (h)  
INVADER oligonucleotide (r)  
Stacker  
ARRESTOR oligonucleotide  
FRET Probe  
Secondary target

5'-CCG TCA CGC CTC CTG TCT GTG AT-NH2-3'  
5'-TCC TGA CAG TGC TCA ATC AGG A-3'  
5'-TCC TGA CAA TGC TCA ATG AGG A-3'  
5'-GTC CCG GAT GTG GCC C-3'  
5'-ATC ACA GAC AGG AGG CG-3'  
5'-FL-CAC (Z28) TGC TTC GTG G-3'  
5'-CCA GGA AGC AAG TGG AGG CGT GAC GGT-3'

(SEQ ID NO:666)  
(SEQ ID NO:667)  
(SEQ ID NO:668)  
(SEQ ID NO:669)  
(SEQ ID NO:670)  
(SEQ ID NO:189)  
(SEQ ID NO:190)

## h/rCYP 1A2 (813C/819C)

Primary probe  
INVADER oligonucleotide (h)  
INVADER oligonucleotide (r)  
ARRESTOR oligonucleotide  
FRET Probe  
Secondary target

5'-AAC GAG GCG CAC GGA CTG TTT TCT GC-NH2-3'  
5'-CTT GTC AAA GTC CTG ATA GTG CTC CTC-3'  
5'-CTT GTT GAA GTC TTG ATA GTG TTC CTC-3'  
5'-GCA GAA AAC AGT CCG TGC GC-3'  
5'-FL-CAC (Z28) TGC TTC GTG G-3'  
5'-CCA GGA AGC AAG TGG TGC GCC TCG TTT-3'

(SEQ ID NO:671)  
(SEQ ID NO:672)  
(SEQ ID NO:673)  
(SEQ ID NO:674)  
(SEQ ID NO:189)  
(SEQ ID NO:625)

## rCYP 2B1, 1017T

Primary probe  
INVADER oligonucleotide  
Stacker  
ARRESTOR oligonucleotide  
FRET Probe  
Secondary target

5'-CCG TCA CGC CTC ACT GCG GTC AT-NH2-3'  
5'-GTG GAT AAC TGC ATC AGT GTA TGG CAT TTT C-3'  
5'-CAA GGG TTG GTA GCC TGT GTG AGC C-3'  
5'-ATG ACC GCA GTG AGG CG-3'  
5'-FL-CAC (Z28) TGC TTC GTG G-3'  
5'-CCA GGA AGC AAG TGG AGG CGT GAC GGT-3'

(SEQ ID NO:675)  
(SEQ ID NO:676)  
(SEQ ID NO:677)  
(SEQ ID NO:678)  
(SEQ ID NO:189)  
(SEQ ID NO:190)

## rCYP 2B2, 162T

Primary probe  
INVADER oligonucleotide  
Stacker  
ARRESTOR oligonucleotide  
FRET Probe  
Secondary target

5'-CCG TCA CGC CTC AGA GCC AAT CAC-NH2-3'  
5'-CGA TCA TCA AGG GAT GGT GGC CTG TGC-3'  
5'-CTG ATC AAT CTC CTT TTG GAC TTT CTC TGC G-3'  
5'-GTG ATT GGC TCT GAG GCG-3'  
5'-FL-CAC (Z28) TGC TTC GTG G-3'  
5'-CCA GGA AGC AAG TGG AGG CGT GAC GGT-3'

(SEQ ID NO:679)  
(SEQ ID NO:680)  
(SEQ ID NO:681)  
(SEQ ID NO:682)  
(SEQ ID NO:189)  
(SEQ ID NO:190)

### rCYP 2E1, 969G

Primary probe  
INVADER oligonucleotide  
Stacker  
ARRESTOR oligonucleotide  
FRET Probe  
Secondary target

5'-CCG TCA CGC CTC CTC AAT TTC TG-NH2-3'  
5'-CCC TGT CAA TTT CTT CAT GAA GTT TA-3'  
5'-GGT ATT TCA TGA GGA TCA GGA GC-3"  
5'-CAG AAA TTG AAG AGG CGG-3'  
5'-FL-CAC (Z28) TGC TTC GTG G-3'  
5'-CCA GGA AGC AAG TGG AGG CGT GAC GGT-3'

(SEQ ID NO:683)  
(SEQ ID NO:684)  
(SEQ ID NO:685)  
(SEQ ID NO:686)  
(SEQ ID NO:189)  
(SEQ ID NO:190)

### rCYP 3A1, 164G

Primary probe  
INVADER oligonucleotide  
Stacker  
ARRESTOR oligonucleotide  
FRET Probe  
Secondary target

5'-AAC GAG GCG CAC CGG GTC CCA-NH2-3'  
5'-TCC CCT GTT TCT TGA AAA GTC CAT GTG TGA-3'  
5'-AAT CCG TAG AGG AGC ACC AGG-3'  
5'-TGG GAC CCG GTG CGC-3'  
5'-FL-CAC (Z28) TGC TTC GTG G-3'  
5'-CCA GGA AGC AAG TGG TGC GCC TCG TTT-3'

(SEQ ID NO:687)  
(SEQ ID NO:688)  
(SEQ ID NO:689)  
(SEQ ID NO:690)  
(SEQ ID NO:189)  
(SEQ ID NO:625)

### rCYP 3A2, 1091G

Primary probe  
INVADER oligonucleotide  
Stacker  
ARRESTOR oligonucleotide  
FRET Probe  
Secondary target

5'-CCG TCA CGC CTC CTC GGC AGG-NH2-3'  
5'-CAC AAT ATC GTA GGT AGG AGG TGC CTT AA-3'  
5'-GCC CCA TCG ATC TCC TCC-3'  
5'-CCT GCC GAG GAG CGC-3'  
5'-FL-CAC (Z28) TGC TTC GTG G-3'  
5'-CCA GGA AGC AAG TGG AGG CGT GAC GGT-3'

(SEQ ID NO:691)  
(SEQ ID NO:692)  
(SEQ ID NO:693)  
(SEQ ID NO:694)  
(SEQ ID NO:189)  
(SEQ ID NO:190)

### rCYP 4A1, 296A

Primary probe  
INVADER oligonucleotide  
Stacker  
ARRESTOR oligonucleotide  
FRET Probe  
Secondary target

5'-AAC GAG GCG CAC TAG GCT TTG CT-NH2-3'  
5'-TTC ATG TAG TCA GGG TCA TAG ACA ATT AAG A-3'  
5'-TCC CCA GAA CCA TCG AGG AAA GG-3'  
5'-AGC AAA GCC TAG TGC GC-3'  
5'-FL-CAC (Z28) TGC TTC GTG G-3'  
5'-CCA GGA AGC AAG TGG TGC GCC TCG TTT-3'

(SEQ ID NO:695)  
(SEQ ID NO:696)  
(SEQ ID NO:697)  
(SEQ ID NO:698)  
(SEQ ID NO:189)  
(SEQ ID NO:625)

## rCYP 4A2

Primary probe  
INVADER oligonucleotide  
Stacker  
ARRESTOR oligonucleotide  
FRET Probe  
Secondary target

5'-AAC GAG GCG CAC AGA AGG CCC CTT-NH2-3'  
5'-CCT TGA ACA GCA CCA GAA ATA GAC TGA GCA C-3'  
5'-GGA AGA ACC CAG AGA CAC CAT CC-3'  
**5'-AAG GGG CCT TCT GTG CGC-3'**  
5'-FL-CAC (Z28) TGC TTC GTG G-3'  
5'-CCA GGA AGC AAG TGG TGC GCC TCG TTT-3'

(SEQ ID NO:699)  
(SEQ ID NO:700)  
(SEQ ID NO:701)  
(SEQ ID NO:702)  
(SEQ ID NO:189)  
(SEQ ID NO:625)

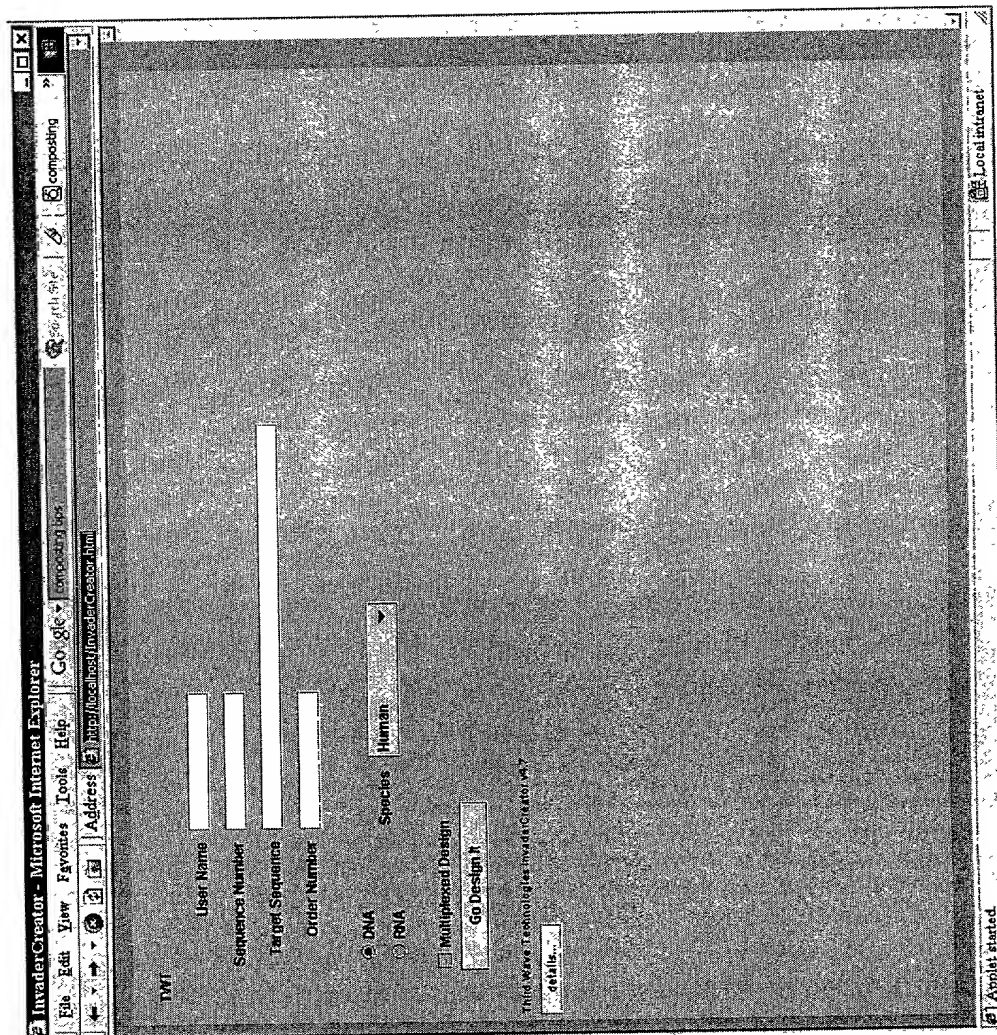
## rCYP 4A3, 1235C

Primary probe  
INVADER oligonucleotide  
Stacker  
ARRESTOR oligonucleotide  
FRET Probe  
Secondary target

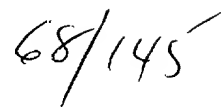
5'-AAC GAG GCG CAC GTT GTG ATA CCT T-NH2-3'  
5'-GAT GAA GGC CAT AAA TTA AAA TTG TGC-3'  
**5'-TGG GTA TGG AAC GTC C-3'**  
**5'-AAG GTA TCA CAA CGT GCG C-3'**  
5'-FL-CAC (Z28) TGC TTC GTG G-3'  
5'-CCA GGA AGC AAG TGG TGC GCC TCG TTT-3'

(SEQ ID NO:703)  
(SEQ ID NO:704)  
(SEQ ID NO:705)  
(SEQ ID NO:706)  
(SEQ ID NO:189)  
(SEQ ID NO:625)

Figure 42



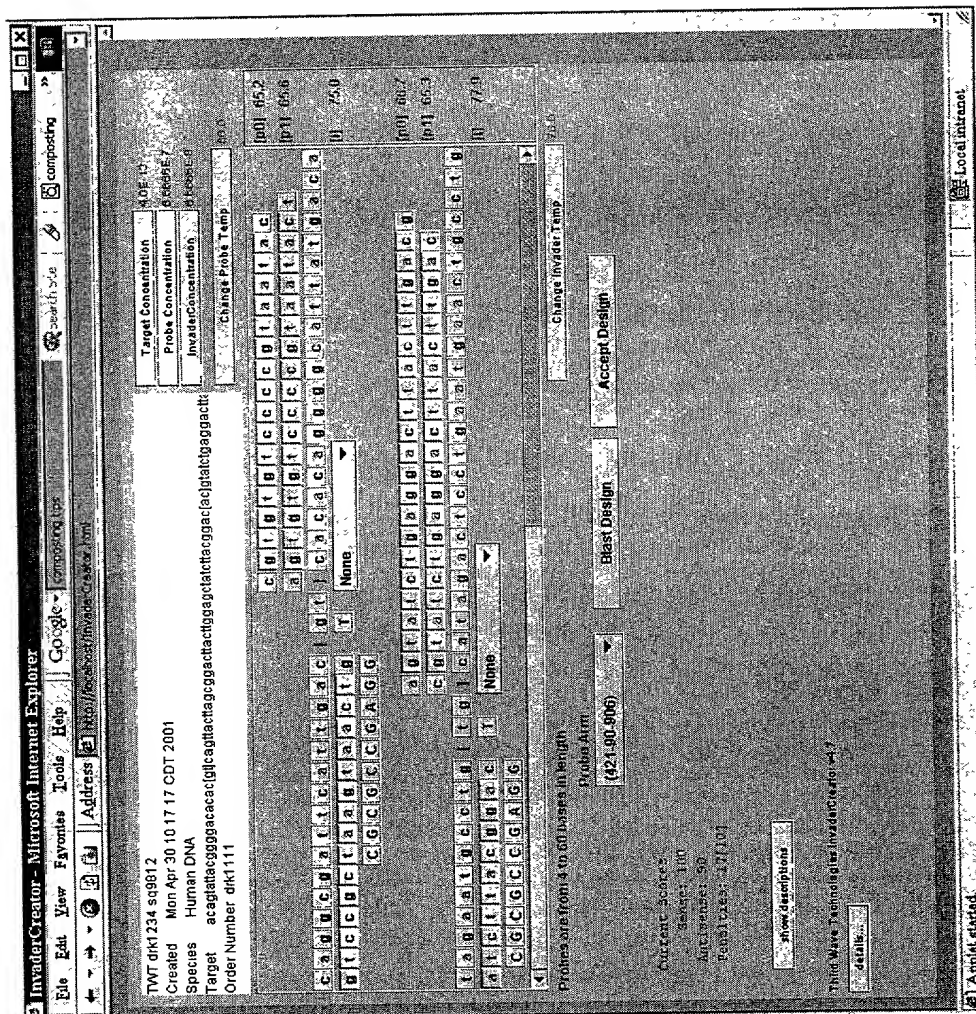
### Figure 43





[illegible]

## Figure 44



69/145





FIGURE 47

Oligo sequence descriptions: 5' to 3' direction, 2'-Ome nts are bolded and underlined, internal modifications defined in ( )

Oligo Type	Oligo Sequence (5' to 3')	Modification	SEQ ID NO
hTNF- $\alpha$			
probe	ccg ccg aga tca ctc tga ctg cct NH2	3' Amine	709
invader	ttg tca ctc ggg gtt cga gaa gat gaa		710
stacker	<u>ggg cca gag ggc tga tta g</u>	<u>all 2'Ome bases</u>	711
stacker	<u>ggg cca gag ggc tga tta</u>	<u>all 2'Ome bases</u>	712
stacker	<u>ggg cca gag ggc tg at</u>	<u>all 2'Ome bases</u>	713
stacker	<u>ggg cca gag ggc t</u>	<u>all 2'Ome bases</u>	714
stacker	<u>ggg cca gag gg</u>	<u>all 2'Ome bases</u>	715
arrestor	<u>agg cag tca gag tga tc</u>	<u>all 2'Ome bases</u>	716
arrestor	<u>agg cag tca gag tga tct c</u>	<u>all 2'Ome bases</u>	717
SRT	cggaagaagcagttggtgatctcgccgNH2		718
FRET probe	Fcaac(Cy3)gcttctccg	3' Amine	719
probe	ccg tca cgc ctc tct gac tgc ct NH2	3' Amine	720
invader	ttg tca ctc ggg gtt cga gaa gat gaa		721
stacker	<u>ggg cca gag ggc tga tta g</u>	<u>all 2'Ome bases</u>	722
arrestor	<u>agg cag tca gag agg cg</u>	<u>all 2'Ome bases</u>	723
SRT	cggaagaagcagttggtgatctcgccgNH2	3'base 2'Ome, 3'Amine	724
FRET probe	Fcaac(Cy3)gcttctccg		725
probe	ccg tca cgc ctc tct gac tgc ctg gNH2	3' Amine	726
invader	ttg tca ctc ggg gtt cga gaa gat gaa		727
arrestor	<u>cca ggc agt cag aga ggc g</u>	<u>all 2'Ome bases</u>	728
SRT	cggaagaagcagttggtgatctcgccgNH2	3'base 2'Ome, 3'Amine	729
FRET probe	Fcaac(Cy3)gcttctccg		730
probe	ccg ccg aga tca ctc tga ctg cc NH2	3' Amine	731
invader	ttg tca ctc ggg gtt cga gaa gat gaa		732
stacker	<u>tgg gcc aga ggg ctg att a</u>	<u>all 2'Ome bases</u>	733
arrestor	<u>agg cag tca gag tga tc</u>	<u>all 2'Ome bases</u>	734
SRT	cggaagaagcagttggtgatctcgccgNH2	3' Amine	735
FRET probe	Fcaac(Cy3)gcttctccg		736
probe	ccg ccg aga tca ctg atc tga ctg NH2	3' Amine	737
invader	ctt gtc act cgg ggt tgc aga aga c		738

72/145

stacker	<u>sct ggg cca gag ggc tga tt</u>	all 2'Ome bases	739
arrestor	<u>cag tca gat cag tga tc</u>	all 2'Ome bases	740
SRT	cggaagaagcagttggtgatctcgccgNH2	3' Amine	741
FRET probe	Fcaac(Cy3)gcttctccg		742
probe	ccg tca cgc ctc tct gac tgc ca NH2	3' Amine	743
probe	ccg tca cgc ctc tct gac tgc cg NH2	3' Amine	744
probe	ccg tca cgc ctc tct gac ggc ct NH2	3' Amine	745
probe	ccg tca cgc ctc tct gac agc ct NH2	3' Amine	746
invader	ttg tca ctc ggg gtt cga gaa gat gaa		747
stacker	<u>ggg cca gag gg</u>	all 2'Ome bases	748
arrestor	<u>agg cag tca gag agg cg</u>	all 2'Ome bases	749
arrestor	<u>agg ccg tca gag agg cg</u>	all 2'Ome bases	750
arrestor	<u>agg ctg tca gag agg cg</u>	all 2'Ome bases	751
SRT	ccaggaaagcagttgagcggtgacggu	3' 3bases 2'Ome	752
FRET probe	Fcaac(Z21)gcttctggtg		753
probe	ccg ccg aga tca ctc tga tgc ctg gg NH2	3' Amine	754
invader	ctt gtc act cgg ggt tcg aga aga tga a		755
arrestor	<u>ccc agg cag tca gag tga tcNH2</u>	all 2'Ome bases, 3' Amine	756
SRT	cgaggaaagcagttggtgatctcgccgNH2	3' 2 last base 2'Ome, 3' Amine	757
FRET probe	Fcaac(Cy3)gcttctccg		758
<hr/>			
hIL-1β			
probe	ccg tca cgc ctc cat ctg ttg agg g NH2	3' Amine	759
invader	cag gtc ctg gaa gga gca ctt a		760
stacker	<u>cca tca gct tct ttg ttc ttg tca tc</u>	all 2'Ome bases	761
arrestor	<u>gcc cta aac aga tgg agg cg</u>	all 2'Ome bases	762
SRT	cggaagaagcagttgagcggtgacggtNH2	3'base 2'Ome, 3'Amine	763
FRET probe	Fcaac(Cy3)gcttctccg		764
probe	ccg tca cgc ctc cat ctg ttg agg gc NH2	3' Amine	765
invader	cag gtc ctg gaa gga gca ctt a		766
stacker	<u>cat cag ctt ctt tct tct tct cat cc</u>	all 2'Ome bases	767
arrestor	<u>gcc cta aac aga tgg agg cg</u>	all 2'Ome bases	768
SRT	cggaagaagcagttgagcggtgacggtNH2	3'base 2'Ome, 3'Amine	769
FRET probe	Fcaac(Cy3)gcttctccg		770
probe	ccg tca cgc ctc cat ctg ttg agg NH2	3' Amine	771

invader	cag gtc ctg gaa gga gca ctt a	772
stacker	<b>gcc atc agc ttc ttt gtt ctt gtc atc</b>	773
SRT	cggaagaagcaggttgaggcgtagcggfNH2	774
FRET probe	Fcaac(Cy3)gcttctccg	775
probe	ccg tca cgc ctc cca tca gct tcNH2	776
invader	gag cac ttc atc tgt tta ggg a	777
stacker	<b>ttt gtt ctt gtc atc ctc att gcc ac</b>	778
arrestor	<b>gaa gct gat ggg agg cg</b>	779
SRT	cggaagaagcaggttgaggcgtagcggfNH2	780
FRET probe	Fcaac(Cy3)gcttctccg	781
probe	ccgcgagatcactcctctgttttagggcNH2	782
probe	ccgcgagatcactcctctgttttagggcNH2	783
invader	caggtcctggaaggagcacta	784
arrestor	<b>ggccctaaacagatgagtgatcNH2</b>	785
SRT	cggaagaagcaggttgaggcgtagcggfNH2	786
FRET probe	Fcaac(Cy3)gcttctccg	787

<b>hcFOS</b>		
probe	ccg tca cgc ctc cag cag gtt ggc NH2	788
invader	gct tga ccc agg gag gg	789
arrestor	<b>gcc aag gtg ctg gag gcg</b>	790
SRT	cggaagaagcaggttgaggcgtagcggfNH2	791
FRET probe	Fcaac(Cy3)gcttctccg	792
probe	ccg tca cgc ctc cag cag gtt gg NH2	793
invader	gct tga ccc agg gag gg	794
stacker	<b>caa tct cgg tct gca aag cag ac</b>	795
arrestor	<b>gcc aag gtg ctg gag gcg</b>	796
SRT	cggaagaagcaggttgaggcgtagcggfNH2	797
FRET probe	Fcaac(Cy3)gcttctccg	798
probe	ccg tca cgc ctc tca gca ggt tgg NH2	799
invader	act cta gtt ttt cct tct cct a	800
stacker	<b>saa tct cgg tct gca aag cag ac</b>	801
arrestor	<b>cca acc tgc tga gag gcg</b>	802
SRT	cggaagaagcaggttgaggcgtagcggfNH2	803
FRET probe	Fcaac(Cy3)gcttctccg	804



# hIL-6

probe ccc aga tca ctc tcc tca ttg aat cct NH2 805  
 probe ccc aga tca ctc tcc tca ttg aat ccNH2 806  
 invader cca aaa gtc cag tga tta tta tca cca ggc aag a 807  
 arrestor agg att caa tga gga aga gtc atc tNH2 808  
 SRT cggaggagcagttggatctcggcgNH2 809  
 FRET probe Fcaac(Cy3)gcttctccg 810

3' Amine  
 3' Amine

all 2'Ome bases, 3' Amine  
 3' 2 last base 2'Ome, 3' Amine

# probe

invader ccc tca cgc ctc ctc att gaNH2 811  
 stacker cca gtc atg att ttc acc agg caa gta 812  
 arrestor tcc aga ttg gaa gca tcc atc t 813  
 SRT tcc aat gag gag gag gc 814  
 FRET probe cggaggagcagttggagcggtgacggtNH2 815  
 Fcaac(Cy3)gcttctccg 816

3' Amine

all 2'Ome bases  
all 2'Ome bases  
 3'base 2'Ome, 3'Amine

# probe

invader ccc tca cgc ctc ctc att gaNH2 817  
 stacker cca gtc atg att ttc acc agg caa gta 818  
 arrestor atc cag att gga agc atc cat ct 819  
 SRT tcc aat gag gag gag gc 820  
 FRET probe cggaggagcagttggagcggtgacggtNH2 821  
 Fcaac(Cy3)gcttctccg 822

3' Amine

all 2'Ome bases  
all 2'Ome bases  
 3'base 2'Ome, 3'Amine

# probe

probe ccc tca cgc ctc ctc att gaa tNH2 823  
 probe ccc tca cgc ctc ctc att gaa taNH2 824  
 probe ccc tca cgc ctc ctc att gaa tNH2 825  
 invader cca aaa gtc cag tga tta tta tca cca ggc aag ta 826  
 stacker cagattggaagcatccatct 827  
 arrestor gattcaatgaggaggaggc 828  
 SRT ccaggaggagcagttggagcggtgacggu 829  
 FRET probe Fcaac(Z21)tgcttctg 830

3' Amine  
 3' Amine  
 3' Amine

all 2'Ome bases  
all 2'Ome bases  
 3' 3bases 2'Ome

# hMCP-1

probe ccc tca cgc ctc ctt cgg agt ttg gNH2 831  
 probe ccc tca cgc ctc ctt cgg agt ttg gtt NH2 832  
 invader ggg ttg tgg agt gag tgt tca agt a 833  
 arrestor aac cca aac tcc gaa ggc ggc gtc gNH2 834  
 SRT cggaggagcagttggagcggtgacggtNH2 835

3' Amine  
 3' Amine

all 2'Ome bases  
 3'base 2'Ome, 3'Amine

FRET probe	Fcaac(Cy3)gcttctccg	836
probe	gcc gtc acg cct ctt tgg gtt tgc ttg tc NH2	837
probe	gcc gtc acg cct ctt tgg gtt tgc ttg tNH2	838
invader	tggagtgtgttcaagcttcggaga	839
arrestor	<b>gacaagcacaacccaagagggcg</b>	840
SRT	cggaagaagcagttggagcggtgacggcNH2	841
FRET probe	Fcaac(Cy3)gcttctccg	842
probe	cct gtc tgc ctg cct tog gag ttt ggg	843
probe	cct gtc tgc ctg cct tog gag ttt gg	844
invader	ggg ttg tgg agt gag tgt tca agt a	845
arrestor	<b>ccc aaa ctc cga agg cag cg</b>	846
SRT	cgagggaagcagttggcagcgagacagNH2	847
SRT	cgagggaagcagttggcagcgagac(Amino dA)ggNH2	848
SRT	cgagggaagcagttggcagcg(Amino dA)gacaggNH2	849
SRT	cgagggaagcagttggc(Amino dA)gagacagNH2	850
SRT	cgagggaagcagttggc(Amino dA)gag(Amino dA)ggNH2	851
SRT	cgagggaagcagttggc(Amino dA)gagagac(Amino dA)ggNH2	852
SRT	cgagggaagcagttggc(Amino dA)gag(Amino dA)gacaggNH2	853
FRET probe	Fcaac(Cy3)gcttctccg	854
probe	gcc gtc acg cct ctg gga cac ttg ctg cNH2	855
invader	gcc aca atg gtc ttg aag atc aca gct tct ta	856
arrestor	<b>gca gca agt gtc cca gag gcg NH2</b>	857
SRT	cggaagaagcagttggagcggtgacggcNH2	858
FRET probe	Fcaac(Cy3)gcttctccg	859
probe	ccg tca cgc ctg ctt cgg agt ttg gg NH2	860
invader	ggg ttg tgg agt gag tgt tca agt a	861
arrestor	<b>5'-ggg-aaa-ctc-cga-agg-agg-cg-3'</b>	862
SRT	ccagggaagcagttggagcggtgacgggu	863
FRET probe	Fcac(Z21)tgcttcgtg	864
probe	cgc cga gat cac ctt cgg agt ttg ggNH2	865
invader	ggg ttg tgg agt gag tgt tca agt a	866
arrestor	<b>ccc aaa ctc cga agg tga tc</b>	867
SRT	cggaagaagcagttgggtgacgcggNH2	868
FRET probe	Fcaac(Cy3)gcttctccg	869

76/145



probe	aac gag gcg cac ctt cgg agt ttg gg NH2	3' Amine	870
invader	ggg ttg tgg agt gag tgt tca agt a		871
arrestor	<b>ccc aaa ctc cga agg tgc g</b>	<b>all 2'Ome bases</b>	872
SRT	cggaagaagcagttggtgcgcctcgttaaNH2	3' last 5 bases <b>2'Ome</b> , 3' Amine	873
FRET probe	Fcaac(Cy3)gcttctccg		874
probe	ccg tca cgc ctc ctt cgg agt ttg g NH2	3' Amine	875
invader	ggg ttg tgg agt gag tgt tca agt a		876
stacker	<b>gtt tgc ttg tcc agg tgg</b>	<b>all 2'Ome bases</b>	877
arrestor	<b>cca aac tcc gaa gga ggc g</b>	<b>all 2'Ome bases</b>	878
SRT	cggaagaagcagttggtgcgcctcgttaaNH2	3'base <b>2'Ome</b> , 3'Amine	879
FRET probe	Fcaac(Cy3)gcttctccg		880
probe	ccg tca cgc ctc ctt cgg agt ttg NH2	3' Amine	881
invader	ggg ttg tgg agt gag tgt tca agt a		882
stacker	<b>gtt ttg ctt gtc cag gtg g</b>	<b>all 2'Ome bases</b>	883
arrestor	<b>cca aac tcc gaa gga ggc g</b>	<b>all 2'Ome bases</b>	884
SRT	cggaagaagcagttggtgcgcctcgttaaNH2	3'base <b>2'Ome</b> , 3'Amine	885
FRET probe	Fcaac(Cy3)gcttctccg		886
probe	ccg tca cgc ctc ctt cgg agt ttNH2	3' Amine	887
invader	ggg ttg tgg agt gag tgt tca agt a		888
stacker	<b>ggg ttt gct tgt cca ggt g</b>	<b>all 2'Ome bases</b>	889
arrestor	<b>cca aac tcc gaa gga ggc g</b>	<b>all 2'Ome bases</b>	890
SRT	cggaagaagcagttggtgcgcctcgttaaNH2	3'base <b>2'Ome</b> , 3'Amine	891
FRET probe	Fcaac(Cy3)gcttctccg		892
probe	ccgtcacgcctccggagttgggNH2	3' Amine	893
invader	gtt gtg gag tga gtg ttc aag tat ta		894
stacker	<b>ttt gct tgt cca ggt ggt cca g</b>	<b>all 2'Ome bases</b>	895
arrestor	<b>ccc aaa ctc cgg agg cg</b>	<b>all 2'Ome bases</b>	896
SRT	cggaagaagcagttggtgcgcctcgttaaNH2	3'base <b>2'Ome</b> , 3'Amine	897
FRET probe	Fcaac(Cy3)gcttctccg		898
probe	cgc cga gat cac cgg agt ttg ggNH2	3' Amine	899
invader	gtt gtg gag tga gtg ttc aag tat ta		900
stacker	<b>ttt gct tgt cca ggt ggt cca g</b>	<b>all 2'Ome bases</b>	901
arrestor	<b>cta gtg gcc tca aac cc</b>	<b>all 2'Ome bases</b>	902
SRT	cggaagaagcagttggtgcgcctcgttaaNH2	3' Amine	903
FRET probe	Fcaac(Cy3)gcttctccg		904

77/145

hUbiquitin probe probe invader arrestor SRT FRET probe	cgc cga gat cac ctt tac att ttc tat cgt	3' Amine	905
	cgc cga gat cac ctt tac att ttc tat cgt NH2		906
	5' -cct tcc tta tcc tgg atc ttg gca -3'		907
	<u>acg ata gaa aat gta aag gtg atc</u>	<u>all 2'Ome bases</u>	908
	5'-cgc agt gag aat gag gtg atc tgc gcggt-3'	<u>3' last 3 bases 2'Ome</u>	909
	5'-Red-ctc-Z21-ttc tca gtg cg-3'		910
hIL-2 probe invader stacker arrestor SRT FRET probe	gtttctttgtgtctccgactgccNH2	3' Amine	911
	cca gca gta aat gct cca gtt gta ga	<u>all 2'Ome bases</u>	912
	<u>tag aac ttg aag tag gtg c</u>	<u>all 2'Ome bases</u>	913
	<u>caa aga aaa cac agg agg c</u>	<u>3' 3bases 2'Ome</u>	914
	ccaggaagcaagtggaggcgtgacgggu		915
	Fcac(Z21)tgcttcgtgg		916
probe invader stacker arrestor SRT FRET probe	aac gag gcg cac ctg tgt ttt ctt tg NH2	3' Amine	917
	cca gca gta aat gct cca gtt gta ga	<u>all 2'Ome bases</u>	918
	<u>tag aac ttg aag tag gtg c</u>	<u>all 2'Ome bases</u>	919
	<u>caa aga aaa cac agg tgc g</u>	<u>3' last 3 bases 2'Ome</u>	920
	ccaggaagcaagtgggtgcgcctcgttt		921
	Fcac(Z21)tgcttcgtgg		922
probe invader stacker arrestor SRT FRET probe	cgc tca cgc ctc ctc cag ttg tag NH2	3' Amine	923
	<u>aaa atc atc tgt aaa tcc agc agt aaa tga</u>	5' 6 bases <u>2'Ome</u>	924
	<u>ctg tgt ttt ctt tgt aga ac</u>	<u>all 2'Ome bases</u>	925
	<u>cta caa ctg gag gag gc</u>	<u>all 2'Ome bases</u>	926
	ccaggaagcaagtggaggcgtgacgggu	<u>3' 3bases 2'Ome</u>	927
	Fcac(Z21)tgcttcgtgg		928
probe invader stacker arrestor SRT FRET probe	aac gag gcg cac ctc cag ttg tag NH2	3' Amine	929
	<u>aaa atc atc tgt aaa tcc agc agt aaa tga</u>	5' 6 bases <u>2'Ome</u>	930
	<u>ctg tgt ttt ctt tgt aga ac</u>	<u>all 2'Ome bases</u>	931
	<u>cta caa ctg gag gtg cg</u>	<u>all 2'Ome bases</u>	932
	ccaggaagcaagtgggtgcgcctcgttt	<u>3' last 3 bases 2'Ome</u>	933
	Fcac(Z21)tgcttcgtgg		934

probe	cgc tca cgc ctc ctc ttt ctt tgt aNH2	3' Amine	935
invader	gta aat cca gca gta aat gct cca gtt gta ga		936
stacker	<u>gaa ctt gaa gta ggt gca ctg tt</u>	<u>all 2'Ome bases</u>	937
arrestor	<u>tacaaagaaacacagaggcgctNH2</u>	<u>all 2'Ome bases, 3' amine</u>	938
SRT	ccaggaagcaagtggagcgctgacggu	<u>3' 3bases 2'Ome</u>	939
FRET probe	Fcac(Z21)tgcttcgtgg		940
probe	aac gag gcg cac ctc ttt ctt tgt aNH2	3' Amine	941
invader	gta aat cca gca gta aat gct cca gtt gta ga		942
stacker	<u>gaa ctt gaa gta ggt gca ctg tt</u>	<u>all 2'Ome bases</u>	943
arrestor	<u>tac aaa gaa aac aca ggt gcg</u>	<u>all 2'Ome bases</u>	944
SRT	ccaggaagcaagtggcgccctcgttt	<u>3' last 3 bases 2'Ome</u>	945
FRET probe	Fcac(Z21)tgcttcgtgg		946
probe	cgc tca cgc ctc ctc cag ttg taa NH2	3' Amine	947
probe	cgc tca cgc ctc ctc cag ttg tat NH2	3' Amine	948
probe	cgc tca cgc ctc ctc cag ttg tac NH2	3' Amine	949
invader	<u>aaa atc atc tgt aaa tcc agc agt aaa tga</u>	5' 6 bases <u>2'Ome</u>	950
stacker	<u>ctg tgt ttt ctt tgt aga ac</u>	<u>all 2'Ome bases</u>	951
arrestor	<u>cta caa ctg gag gag gc</u>	<u>all 2'Ome bases</u>	952
SRT	ccaggaagcaagtggagcgctgacggu	<u>3' 3bases 2'Ome</u>	953
FRET probe	Fcac(Z21)tgcttcgtgg		954
probe	gcc gtc acg cct ttc ttg atg NH2	3' Amine	955
invader	ttc tag aca ctg aag atg ttt cag ttc tgt gga		956
arrestor	<u>cat gcc caa gaa ggg agg cg NH2</u>	<u>all 2'Ome bases, 3' Amine</u>	957
SRT	cggaagaagcagttggagcgctgacggcNH2	<u>3'2 bases 2'Ome, 3' Amine</u>	958
FRET probe	Fcaac(Cy3)gcttcctccg		959
probe	cgc tca cgc ctc taa ttc cat tca aaa tca tct NH2	3' Amine	960
invader	cat cct ggt gag ttg ggg att ctt gta att tat a		961
stacker	<u>gta aat cca gca gta aat gct cca gNH2</u>	<u>all 2'Ome bases, 3' Amine</u>	962
arrestor	<u>aga tga ttt tga atg gaa tta gag gcg NH2</u>	<u>all 2'Ome bases, 3' Amine</u>	963
SRT	cggaagaagcagttggagcgctgacggcNH2	<u>3'2 bases 2'Ome, 3' Amine</u>	964
FRET probe	Fcaac(Cy3)gcttcctccg		965
probe	ccg ccg aga tca cct ctg ttt tct ttg ta		966
invader	gta aat cca gca gta aat gct cca gtt gta ga		967
stacker	<u>gaa ctt gaa gta ggt gca ctg tt</u>	<u>All 2' Ome</u>	968
stacker	gaa ctt gaa gta ggt gca ctg tt		969

stacker	<b>gaa</b> ctt gaa gta ggt gca ctg tt	5' 3bases 2'Ome	970
stacker	<b>gaa</b> <b>ctt</b> gaa gta ggt gca ctg tt	5' 6bases 2'Ome	971
arrestor	<b>tac</b> <b>aaa</b> <b>gaa</b> <b>aac</b> <b>aca</b> <b>ggt</b> <b>gat</b> <b>ct</b>	All 2' Ome	972
SRT	cggaggaagcagttggtgatctcgccgNH2	3' 2 last base 2'Ome, 3' Amine	973
FRET probe	Fcaac(Cy3)gcttctccg		974
probe	aac gag gcg cac cct tct tgg gca tgNH2	3' Amine	975
invader	ttc tag aca ctg aag atg ttt cag ttc tgt gga		976
arrestor	<b>cat</b> <b>gcc</b> <b>caa</b> <b>gaa</b> <b>ggg</b> <b>tcg</b> <b>gNH2</b>	all 2'Ome bases	977
SRT	cggagaagcagttggtgcgcctcggttaaNH2	3' last 5 bases 2'Ome, 3' Amine	978
FRET probe	Fcaac(Cy3)gcttctccg		979
probe	aac gag gcg cac taa ttc cat tca aaa tca tct		980
invader	cat cct ggt gag ttt ggg att ctt gta att tat a		981
stacker	<b>gta</b> <b>aat</b> <b>cca</b> <b>gca</b> <b>gta</b> <b>aat</b> <b>gct</b> <b>cca</b> <b>gNH2</b>	all 2'Ome bases, 3' Amine	982
arrestor	<b>aga</b> <b>tga</b> <b>ttt</b> <b>tga</b> <b>atg</b> <b>gaa</b> <b>tta</b> <b>gtg</b> <b>gt</b> <b>gNH2</b>	all 2'Ome bases, 3' Amine	983
SRT	cggagaagcagttggtgcgcctcggttaaNH2	3' last 5 bases 2'Ome, 3' Amine	984
FRET probe	Fcaac(Cy3)gcttctccg		985

hIL-4			
probe	cct gtc tgc ctg cca gtt gtg ttc ttg gag NH2	3' Amine	986
invader	ccc tgc aga agg ttt cct tct a		987
invader	ccc tgc aga tgg ttt cct tct a		988
arrestor	<b>ctc</b> <b>caa</b> <b>gaa</b> <b>cac</b> <b>aac</b> <b>tgg</b> <b>cag</b> <b>cNH2</b>	all 2'Ome bases, 3' Amine	989
arrestor	<b>ctc</b> <b>caa</b> <b>gaa</b> <b>cac</b> <b>aac</b> <b>tgg</b> <b>cag</b> <b>cga</b> <b>NH2</b>	all 2'Ome bases, 3' Amine	990
arrestor	<b>ctc</b> <b>caa</b> <b>gaa</b> <b>cac</b> <b>aac</b> <b>tgg</b> <b>cag</b> <b>cga</b> <b>ga</b> <b>NH2</b>	all 2'Ome bases, 3' Amine	991
SRT	cggaggaagcagttggtgcgcgcagagagcagNH2	3' last base 2'Ome, 3' Amine	992
FRET probe	Fcaac(Cy3)gcttctccg		993
probe	aac gag gcg cac ctt gga ggc agc aaa NH2	3' Amine	994
probe	aac gag gcg cac ctt gga ggc agc aaNH2	3' Amine	995
invader	aag gtt tcc ttc tca gtt gtg tta		996
arrestor	<b>ctt</b> <b>tgc</b> <b>ctc</b> <b>ctc</b> <b>caa</b> <b>ggt</b> <b>gcg</b> <b>NH2</b>	all 2'Ome bases, 3' Amine	997
SRT	cggaggaagcagttggtgcgcctcggttaa NH2	3' last 5 bases 2'Ome, 3' Amine	998
FRET probe	Fcaac(Cy3)gcttctccg		999
probe	cag tca cgt ctc tgg agg cag caa aga tg NH2		1000
invader	aag gtt tcc ttc tca gtt gtg ttc ta		1001
arrestor	<b>cat</b> <b>ctt</b> <b>tgc</b> <b>ctc</b> <b>cag</b> <b>aga</b> <b>cg</b> <b>NH2</b>	all 2'Ome bases, 3' Amine	1002

SRT 1003  
FRET probe 1004  
gctactgagatgaaggagcgtgactgtatNH2  
Fcttc(Cy3)tctcagtagc 3' Amine

probe 1005  
invader 1006  
arrestor 1007  
SRT 1008  
FRET probe 1009  
aac gag ggc cac ctt gga ggc agc aaa g NH2  
aag gtt tcc ttc tca gtt gttg tta  
**act tgc tgc ctc caa ggt ggc NH2**  
cggaggaagcagttggtgcgcctcgttaa  
Fcaac(Cy3)gcttctctcg  
all 2'Ome bases, 3' Amine  
3' last 5 bases 2'Ome

mIL-2  
probe 1010  
invader 1011  
arrestor 1012  
SRT 1013  
FRET probe 1014  
cgc cga gat cac ccc ttt agt ttt aca aca gtNH2  
gaa ttg gca ctc aaa tgt gtt gtc aga ga  
**act gtt gta aaa cta aag ggc ggc atc t NH2**  
cggaggaagcgttggatcgcgcgNH2  
Fcaac(Cy3)gcttctctcg  
3' Amine  
all 2'Ome bases, 3' Amine  
3' last two bases are 2' Ome , 3' Amine

probe 1015  
invader 1016  
arrestor 1017  
arrestor 1018  
arrestor 1019  
arrestor 1020  
SRT 1021  
FRET probe 1022  
tgc cgc cga gat cac ccc ttt agt ttt aca aca gtNH2  
gaa ttg gca ctc aaa tgt gtt gtc aga ga  
**act gtt gta aaa cta aag ggc ggc NH2**  
**act gtt gta aaa cta aag ggc ggc at NH2**  
**act gtt gta aaa cta aag ggc ggc at ctNH2**  
**act gtt gta aaa cta aag ggc ggc at ctgcNH2**  
cggaggaagcgttggatcgcgcgNH2  
Fcaac(Cy3)gcttctctcg  
3' Amine  
all 2'Ome bases, 3' Amine  
all 2'Ome bases, 3' Amine  
all 2'Ome bases, 3' Amine  
all 2'Ome bases, 3' Amine  
3' Last 2bases 2'Ome, 3' Amine

probe 1023  
probe 1024  
invader 1025  
arrestor 1026  
SRT 1027  
FRET probe 1028  
gc cgc cga gat cac ccc ttt agt ttt aca aca gtNH2  
c cgc cga gat cac ccc ttt agt ttt aca aca gtNH2  
gaa ttg gca ctc aaa tgt gtt gtc aga ga  
**act gtt gta aaa cta aag ggc ggc at NH2**  
cggaggaagcgttggatcgcgcgNH2  
Fcaac(Cy3)gcttctctcg  
3' Amine  
3' Amine  
all 2'Ome bases, 3' Amine  
3' Last 2bases 2'Ome, 3' Amine

probe 1029  
invader 1030  
arrestor 1031  
SRT 1032  
FRET probe 1033  
aac gag ggc cac ccc ttt agt ttt aca aca gt NH2  
gaa ttg gca ctc aaa tgt gtt gtc aga ga  
**agtaactgttgaataaagggtgcg**  
cggaggaagcagttggtgcgcctcgttaa  
Fcaac(Cy3)gcttctctcg  
all 2'Ome bases, 3' Amine  
3' last 5 bases 2'Ome

probe 1034  
aac gag ggc cac ccc ttt agt ttt aca aca gt NH2  
3' Amine

81/145

invader  
arrestor  
SRT  
FRET probe

gaa ttg gca ctc aaa tgt gtt gtc aga ga  
**agt aac tgt tgt aaa act aaa ggg gtg cg NH2**  
cggaggaaagcagttggtgcgcctcgttaa  
Fcaac(Cy3)gcttcctcgg

1035  
1036  
1037  
1038

all 2'Ome bases, 3' Amine  
3' last 5 bases 2'Ome

probe  
invader  
stacker  
arrestor  
SRT  
FRET probe

cggtaacgctcccttagttttacaacNH2  
gaa ttg gca ctc aaa tgt gtt gtc aga ga  
**agt tac tct gat att gct gat gaa att ctc ag**  
**gtt gtaaaactaaagggaggcg**  
cggaaagaagcagttggaggcgtagcggfNH2  
Fcaac(Cy3)gcttcctcgg

1039  
1040  
1041  
1042  
1043  
1044

3' Amine  
  
all 2'Ome bases,  
all 2'Ome bases,  
3'base 2'Ome, 3'Amine

probe  
invader  
stacker  
arrestor  
SRT  
FRET probe

cgccgagatcaccccttagttttacaacNH2  
gaa ttg gca ctc aaa tgt gtt gtc aga ga  
**agt tac tct gat att gct gat gaa att ctc ag**  
**gtt gtaaaactaaaggggggagc**  
cggaaagaagcagttggtagctcggcgNH2  
Fcaac(Cy3)gcttcctcgg

1045  
1046  
1047  
1048  
1049  
1050

3' Amine  
  
All 2'Ome  
All 2'Ome  
3' Amine

probe  
invader  
stacker  
arrestor  
SRT  
FRET probe

cggtaacgctcccttagttttacaacNH2  
gaa ttg gca ctc aaa tgt gtt gtc aga ga  
**cagttactctgatatgtctgatgaaattctca**  
**gtt gtaaaactaaagggggaggcg**  
cggaaagaagcagttggaggcgtagcggfNH2  
Fcaac(Cy3)gcttcctcgg

1051  
1052  
1053  
1054  
1055  
1056

3' Amine  
  
All 2'Ome  
All 2'Ome  
3'base 2'Ome, 3'Amine

probe  
invader  
stacker  
arrestor  
SRT  
FRET probe

cggtaacgctcccttagttttacaacNH2  
gaa ttg gca ctc aaa tgt gtt gtc aga ga  
**cagttactctgatatgtctgatgaaattctca**  
**gtt gtaaaactaaagggggaggcg**  
ccaggaaagcagttggaggcgtagcggfNH2  
Fcaac(Cy3)gcttcgtgg

1057  
1058  
1059  
1060  
1061  
1062

3' Amine  
  
All 2'Ome  
All 2'Ome  
3' 2 bases 2'Ome, 3'Amine

mIL-10  
probe  
invader  
stacker  
arrestor  
SRT

ccg tca cgc ctc ccg tta gct aag at NH2  
cga ggt tt cca agg agt tgt tta  
**ccc tgg atc aga tt aga gag c**  
**atc tta gct aac ggg agg cg**  
cggaaagaagcagttggaggcgtagcggfNH2

1063  
1064  
1065  
1066  
1067

3' Amine  
  
all 2'Ome bases,  
all 2'Ome bases,  
3'base 2'Ome, 3'Amine

FRET probe	Fcaac(Cy3)gcttcctcgg	1068
probe	ccg tca cgc ctc agt tgt ttc cgt tNH2	
invader	aga ggt aca aac gag gtt ttc caa ggc	1069
stacker	<u>agg taa gat ccc tgg atc aga ttt aga ga</u>	1070
arrestor	<u>aac gga aac aac tga ggc g</u>	1071
SRT	ccaggaagcaagtggagggctgacggu	1072
FRET probe	Fcac(Z21)tgcttcgtgg	1073
probe	ccg tca cgc ctc ccg tta gct aNH2	1074
invader	caa acg agg ttt tcc aag gag ttg a	1075
stacker	<u>aga tcc ctg gat cag att tag aga gct c</u>	1076
arrestor	<u>tag cta acg gaa aga ggc g</u>	1077
SRT	ccaggaagcaagtggagggctgacggu	1078
FRET probe	Fcac(Z21)tgcttcgtgg	1079
probe	ccg tca cgc ctc ccg tta gNH2	1080
invader	aga ggt aca aac gag gtt ttc caa gga ga	1081
stacker	<u>cta aga tcc ctg gat cag att tag aga g</u>	1082
arrestor	<u>cta acg gaa caa gaggcg</u>	1083
SRT	ccaggaagcaagtggagggctgacggu	1084
FRET probe	Fcac(Z21)tgcttcgtgg	1085
hIFN- $\gamma$ probe	aac gag gcg cac ctt acc aat gcc taa gaa aag agt tNH2	1086
invader	tgc att att ttt ctg tca ctc tcc tct ttc caa tta	1087
arrestor	<u>aac tct ttt ctt agg cat ttt gaa ggt gcg NH2</u>	1088
SRT	cgaggaagcagttggcgccctcgttaaNH2	1089
FRET probe	Fcaac(Cy3)gcttcctcgg	1090
probe	cag tca cgt ctc tct tca aaa tgc cta aga aaa gag tNH2	1091
invader	tct gca tta ttt ttc tgc cac tct cct ctt tcc aat a	1092
arrestor	<u>act ctt ttc tta ggc att ttg aag aga gac gNH2</u>	1093
SRT	<u>gctactgagatgaagagacgtgactgttaNH2</u>	1094
FRET probe	Fcttc(Cy3)tcctagtagc	1095
mIFN- $\gamma$ probe	aac gag gcg cac cct ttt gcc agt tcc NH2	1096
	3' Amine	1097

invader  
arrestor  
SRT  
FRET probe

gct ctg cag gat ttt cat gtc acc ata  
gag gaa ctg gca aaa ggg tgc gNH2  
gctactgagatgaaggagcgtgactgtaNH2  
Fcttc(Cy3)lctcagtagc

all 2'Ome bases, 3' Amine  
all 2'Ome bases, 3' Amine

probe  
invader  
stacker  
arrestor  
SRT  
SRT  
FRET probe

aac gag gcg cac cct ttt gcc agt NH2  
gct ctg cag gat ttt cat gtc acc ata  
tcc tcc aga tat cca aga aga gac tc  
act ggc aaa agg cgg gc  
cgg agg aaag cag ttg gtc cgc ctc guu aa NH2  
cgg aag aaag cag ttg gtc cgc ctc guu aa NH2  
Fcaac(Cy3)gcttctcgcg

3' Amine

all 2'Ome bases  
all 2'Ome bases

3' last 5 bases 2'Ome  
3' last 5 bases 2'Ome

probe  
invader  
stacker  
arrestor  
SRT  
FRET probe

gcc gca cgc cgc ctt ttg cca gt NH2  
gct ctg cag gat ttt cat gtc acc ata  
tcc tcc aga tat cca aga aga gac tc  
act ggc aaa agg cgg gc  
cgg agg aag cag ttg cgg cgt gcg gca NH2  
Fcaac(Cy3)gcttctcgcg

3' Amine

all 2'Ome bases  
all 2'Ome bases

probe  
invader  
stacker  
arrestor  
SRT  
FRET probe

aac gag gcg cac cct ttt gcc agt tc NH2  
gct ctg cag gat ttt cat gtc acc ata  
ctc cag ata tcc aag aag aga ctc  
gaa ctg gca aaa ggg tgc g  
cggaggagcagttggcgccctcgttaaNH2  
Fcaac(Cy3)gcttctcgcg

3' Amine

all 2'Ome bases  
all 2'Ome bases

3' last5 bases 2'Ome

# hIL-8

probe  
probe  
invader  
arrestor  
arrestor  
SRT  
FRET probe

ccg tca cgc ctc ctt ggc aaa act gca ccNH2  
ccg tca cgc ctc ctt ggc aaa act gca cca NH2  
ctt tat gca ctg aca tct aag ttc tt agc act ca  
tgg tgc agt ttt gcc aag gag gcg NH2  
tgg tgc agt ttt gcc aag gag gcg tg NH2  
cggagaagcagttggaggcgtgacggcNH2  
Fcaac(Cy3)gcttctcgcg

3' Amine  
3' Amine

all 2'Ome bases, 3' Amine  
all 2'Ome bases, 3' Amine  
3'2 bases 2'Ome, 3'Amine

probe  
probe  
invader

ccg tca cgc ctc cat ctt cac tga ttc ttg gNH2  
ccg tca cgc ctc cat ctt cac tga ttc ttg gaNH2  
agt gtt gaa gta gat ttg ctt gaa gtt tca ctg ga

3' Amine  
3' Amine



stacker	<b>gat acc aca gag aat gaa tttt</b>	<b>all 2'Ome bases</b>	1131
arrestor	<b>tcc aag aat cag tga aga tgg agg cg NH2</b>	<b>all 2'Ome bases, 3' Amine</b>	1132
arrestor	<b>tcc aag aat cag tga aga tgg agg cgt gNH2</b>	<b>all 2'Ome bases, 3' Amine</b>	1133
arrestor	<b>g aat cag tga aga tgg agg cg</b>	<b>all 2'Ome bases</b>	1134
SRT	cggaagaagcagttggaggcgtgacgcgNH2	3'2 bases <b>2'Ome</b> , 3' Amine	1135
FRET probe	Fcaac(Cy3)gcttcctccg		1136
probe	cgc tca cgc cct tgg ctc aat ttt gct NH2	3' Amine	1137
invader	cca ttc aat tcc tga aat taa agt tgc gat att ctc ttg gca		1138
invader	<b>cc tga aat taa agt tgc gat att ctc ttg gca</b>	<b>5' 10 bases are 2'Ome</b>	1139
invader	cc tga aat taa agt tgc gat att ctc ttg gca		1140
arrestor	<b>agc aaa att gag cca agg gag gcg NH2</b>	<b>all 2'Ome bases, 3' Amine</b>	1141
arrestor	<b>agc aaa att gag cca agg gag gcg tNH2</b>	<b>all 2'Ome bases, 3' Amine</b>	1142
SRT	cggaagaagcagttggaggcgtgacgcgNH2	3'2 bases <b>2'Ome</b> , 3' Amine	1143
FRET probe	Fcaac(Cy3)gcttcctccg		1144
probe	cgc tca cgc ctc cat ctt cac tga ttc ttg NH2	3' Amine	1145
invader	ttc tag caa acc cat tca att cct gaa att aaa gtt cgg ata ttc ta		1146
invader	<b>cc cat tca att cct gaa att aaa gtt cgg ata ttc ta</b>	<b>5' 10 bases 2'Ome</b>	1147
invader	cc cat tca att cct gaa att aaa gtt cgg ata ttc ta		1148
arrestor	<b>cca agg gcc aag gag gcg tNH2</b>	3'2 bases <b>2'Ome</b> , 3' Amine	1149
SRT	cggaagaagcagttggaggcgtgacgcgNH2		1150
FRET probe	Fcaac(Cy3)gcttcctccg		1151
probe	cgc tca cgc ctc cat ctt cac tga ttc ttc NH2	3' Amine	1152
invader	agt gtt gaa gta gat ttg ctt gaa gtt tca ctg ga		1153
stacker	<b>tfg gat acc aca gag aat gaa tt</b>	<b>all 2'Ome bases</b>	1154
SRT	cggaagaagcagttggaggcgtgacgcgNH2	3' base <b>2'Ome</b> , 3' Amine	1155
FRET probe	Fcaac(Cy3)gcttcctccg		1156
probe	cgc tca cgc ctc cat ctt cac tga tt NH2	3' Amine	1157
invader	agt gtt gaa gta gat ttg ctt gaa gtt tca ctg ga		1158
stacker	<b>ctt gga tac cac aga gaa tga att</b>	3' base <b>2'Ome</b> , 3' Amine	1159
SRT	cggaagaagcagttggaggcgtgacgcgNH2		1160
FRET probe	Fcaac(Cy3)gcttcctccg		1161
probe	cgc tca cgc ctc cat ctt cac tga ttc ttg NH2	3' Amine	1162
invader	agt gtt gaa gta gat ttg ctt gaa gtt tca ctg ga		1163
helper	<b>ata-cca-cag-aga-atg-aat-ttt-ttt-atg</b>	<b>all 2'Ome bases</b>	1164
arrestor	<b>tcc aag aat cag tga aga tgg agg cgt gNH2</b>	<b>all 2'Ome bases, 3' Amine</b>	1165

SRT FRET probe	cggaagaagcagtggtgagcggtgacggtNH2 Fcaac(Cy3)gcttcctccg	3'base <u>2'Ome</u> , 3'Amine	1166 1167
SRT FRET probe	cggaagaagcagtggtgatctcgcggtNH2 Fcaac(Cy3)gcttcctccg	3' Amine	1168 1169
SRT FRET probe	cggaagaagcagtggtgagcggtgacggtNH2 Fcaac(Cy3)gcttcctccg	3'base <u>2'Ome</u> , 3'Amine	1170 1171
SRT FRET probe	ccaggaagcaagtggagcggtgacggu Fcaac(Z21)gcttcgtgg	3' 3bases <u>2'Ome</u>	1172 1173
SRT FRET probe	cggaagaagcagtggtgatctcgcggtNH2 Fcaac(Cy3)gcttcctccg	3' 2 last base <u>2'Ome</u> , 3' Amine	1174 1175
SRT FRET probe	cggaagaagcagtggtgagcggtgacggtNH2 Fcaac(Cy3)gcttcctccg	3'2 bases <u>2'Ome</u> , 3'Amine	1176 1177
SRT FRET probe	ccaggaagcaagtgggtcgccctcgttt Fcaac(Z21)gcttcgtgg	3' last 3 bases <u>2'Ome</u>	1178 1179
SRT FRET probe	cggaagaagcagtggtgagcggtgacggtNH2 Fcaac(Cy3)gcttcctccg	3' last5 bases 2'Ome	1180 1181
SRT FRET probe	cggaagaagcagtggtgatctcgcggtNH2 Fcaac(Cy3)gcttcctccg	3' Last 2bases 2'Ome, 3' Amine	1182 1183
SRT FRET probe	gctactgagatgaagagacgtgactgtNH2 Fcttc(Cy3)tctcagtagc	3' Amine	1184 1185
SRT FRET probe	ccaggaagcagtggtgagcggtgacggtNH2 Fcaac(Cy3)gcttcgtgg	3' 2 bases <u>2'Ome</u> , 3'Amine	1186 1187
h3A4 probe h3A4 invader Capture Sequence	agg agc cac tcc att gga tga agc atg tac aga atc ccc ggt tat tta tgc aga		1188 1189

Set 1

86/145

1190  
1191

h3A4 probe  
h3A4 invader  
Capture Sequence

1192  
1193  
1194  
1195  
1196

Set 2/Set 3  
h3A4 probe  
h3A4 arrestor  
h3A4 invader  
h3A4 stacking oligo  
h3A4 stacking oligo  
SRT  
FRET Oligo

1197  
1198  
1199  
1200

Set 4  
h3A4 probe  
h3A4 arrestor  
h3A4 invader  
h3A4 stacking oligo  
SRT  
FRET Oligo

1201  
1202  
1203  
1204

Set 5  
h3A4 probe  
h3A4 arrestor  
h3A4 invader  
SRT  
FRET probe

1205  
1206  
1207  
1208

Set 6  
h3A4 probe  
h3A4 arrestor  
h3A4 invader  
SRT  
FRET probe

1209  
1210  
1211  
1212

Set 7/Set 8  
h3A4 probe  
h3A4 probe  
h3A4 arrestor  
h3A4 stacking oligo

87/145

1213

cct cct tta tat tcc caa gta taa cac tct aa

h3A4 invader

SRT

FRET Oligo

Set 9

aac gag ggc cac cac aga caa tga ga-NH2

h3A4 probe

tct cat tgt ctg tgg tgc gc-NH2

h3A4 arrestor

cct cct tta tat tcc caa gta taa cac tct aa

h3A4 invader

gag ctc aat gca tgt aca gaa tcc ccg

h3A4 stacking oligo

SRT

FRET Oligo

1214

1215

1216

1217

Set 1/Set 2

AACGAGGCGCACCTCTTATCAGAGCTC

h3A4 probe

AACGAGGCGCACCTCTTATCAGAGCTC-NH2

h3A4 probe

tgt tgg agg aaa tta ttg aga aat gtt gat ta

h3A4 invader

GAGCTCTGATAAGAGGTCG-NH2

h3A4 arrestor

SRT

1218

1219

1220

1221

Set 1/ Set 2/ Set 3

ccg tca cgc ctc gcc cca ca - NH2

h3A4 probe

tgt ggg gcg agg cg

h3A4 arrestor

cag cac agg ctg ttg acc atc ata aaa c

h3A4 invader

cuu-uuc-cau-acu-uuu-uau-gac-auu-c

h3A4 stacking oligo

ctt ttc cag act ttt tat gac att c

h3A4 stacking oligo

ctt ttc cag act ttt tat gac

SRT

FRET

1222

1223

1224

1225

1226

1227

Set 4/Set 5

ccg tca cgc ctc gcc cca ca

h3A4 probe

ccg tca cgc ctc gcc cca ca - HEX

h3A4 probe

cag cac agg ctg ttg acc atc ata aaa c

h3A4 invader

cuu-uuc-cau-acu-uuu-uau-gac-auu-c

h3A4 stacking oligo

SRT

FRET

1228

1229

1230

1231

Set 6/ Set 7/ Set 8

ccg tca cgc ctc gcc cca cc - NH2

h3A4 probe

1232

88/145



1254  
1255

h3A5 invader  
h3A5 stacking oligo  
SRT  
FRET

aat ggg ttt ttc ttg aag aag tcc ttg a  
ggg atc tgt gtt tct tta caa ggt

1256  
1257  
1258  
1259

Set 5  
h3A5 probe  
h3A5 arrestor  
h3A5 invader  
h3A5 stacking oligo  
SRT  
FRET

AACGAGGCGCACCGTGCTCTAATTTCAAG  
ctt gaa att aga cac ggt tct c  
ggg ttt tct ggt tga aga agt cct tga  
ggg atc tct gtt tct

1260  
1261  
1262

Set 6  
h3A5 probe  
h3A5 arrestor  
h3A5 invader  
SRT  
FRET probe

AACGAGGCGCACCGTGCTCTAATTTCAAGGG-NH2  
CCCTTGAAATTAGACACGGTGCG-NH2  
aat ggg ttt ttc ttg ttg aag aag tcc ttg a

1263

FL-caa-c(cy3)g-ctt-cct-ccg

1264  
1265  
1266  
1267  
1268  
1269

Set 7/Set 8  
h3A5 probe  
h3A5 probe  
h3A5 arrestor  
h3A5 arrestor  
h3A5 invader  
h3A5 stacking oligo  
SRT  
FRET

aac gag gcg cac cgt gtc taa ttt caa gg-NH2  
aac gag gcg cac cgt gtc taa ttt caa gg  
cct tga aat tag aca cgg tgc gc-NH2  
cct tga aat tag aca cgg tgc gc  
aat ggg ttt ttc ttg ttg aag aag tcc ttg a  
gga tct gtg ttt ctt tac aag gtt tga agg ag

1270  
1271  
1272  
1273

Set 9  
h3A5 probe  
h3A5 arrestor  
h3A5 invader  
h3A5 stacking oligo  
SRT  
FRET

aac gag gcg cac cgt gtc taa ttt caa-NH2  
ttg aaa tta gac acg gtc cgc-NH2  
aat ggg ttt ttc ttg ttg aag aag tcc ttg a  
ggg gat ctg tgt ttc ttt aca agg

1274

Set 10  
h3A5 probe

aac gag gcg cac cgt gtc taa ttt ca - NH2

90/145

1275  
1276  
1277

**tga aat tag aca cgg tgc gc**  
ggg ttt tct ggt tga aga agt cct tga  
**agg gga tct gtc ttt ct**

h3A5 arrestor  
h3A5 invader  
h3A5 stacking oligo  
SRT  
FRET

1278  
1279

tgg cgt atc tga ccc ttt ggg aat  
gaa gag cat aag ttg gaa tca cca cca ta

Set 1  
h3A5 probe  
h3A5 invader  
Capture Sequence

1280  
1281

ata cgg ttg gtc ctc tca agt cta  
ccc cat tga ttt caa cat ctt tct tgc aac

Set 1  
h3A5 probe  
h3A5 invader  
Capture Sequence

1282  
1283  
1284  
1285

aac gag gcg cac gcg tgt cta att tc - NH2  
**gaa att aga cac gcg tgc gc**  
ggg ttt tct ggt tga aga agt cct tc  
**ccg ggg atc tgt gtt tc**

Set 2/Set 3  
h3A5 probe  
h3A5 arrestor  
h3A5 invader  
h3A5 stacking oligo  
SRT  
FRET

1286  
1287  
1288  
1289

ccg tca cgc ctc gcg tgt cta att tc -NH2  
**gaa att aga cac gcg agg cg**  
ggg ttt tct ggt tga aga agt cct tc  
**ccg ggg atc tgt gtt tc**

h3A5 probe  
h3A5 arrestor  
h3A5 invader  
h3A5 stacking oligo  
SRT  
FRET

1290  
1291  
1292  
1293

aac gag gcg cag ttc ata cgt tcc -NH2  
**gga acg tat gaa ctg cgc**  
cca gca cag gga gtt gac ca  
**cca cat ttt tcc ata ctt t**

Set 1  
h3A5 probe  
h3A5 arrestor  
h3A5 invader  
h3A5 stacking oligo  
SRT  
FRET  
Set 2

9/1/14

1294  
1295  
1296  
1297

h3A5 probe  
h3A5 arrestor  
h3A5 invader  
h3A5 stacking oligo  
SRT  
FRET

ccg tca cgc ctg ttc ata cgt tcc -NH2  
gga acg tat gaa cag gcg  
cca gca cag gga gtt gac ca  
cca cat ttt tcc ata ctt t

1298  
1299  
1300  
1301  
1302  
1303  
1304

Set 1-Set 4  
h3A5 probe  
h3A5 probe  
h3A5 probe  
h3A5 arrestor  
h3A5 invader  
h3A5 stacking oligo  
h3A5 stacking oligo  
SRT  
FRET

aac gag gcg cac agt tga oct tca  
aac gag gcg cac agt tga oct tca  
aac gag gcg cac agt tga oct tca - HEX  
tga agg tca act gtg cgc  
gtg atg gcc agc aca ggg c  
tac gtt ccc cac att ttt c  
tac gtt ccc cac att ttt c

1305  
1306  
1307  
1308

Set 5  
h3A5 probe  
h3A5 arrestor  
h3A5 invader  
h3A5 stacking oligo  
SRT  
FRET

ccg tca cgc ctc agt tga cct tca  
tga agg tca act gag gcg  
gtg atg gcc agc aca ggg c  
tac gtt ccc cac att ttt c

1309  
1310  
1311  
1312

Set 6  
h3A5 probe  
h3A5 arrestor  
h3A5 invader  
h3A5 stacking oligo  
SRT  
FRET

aac gag gcg cac tcc tct caa gt -NH2  
act tga gag gag tgc gc  
cca ttg att tca aca tct ttc ttg caa ga  
cta ata gca act ggg aat aat c

1313  
1314  
1315  
1316

Set 7  
h3A5 probe  
h3A5 arrestor  
h3A5 invader  
h3A5 stacking oligo  
SRT

ccg tca cgc ctc tcc tct caa gt - NH2  
act tga gag gag agg cg  
cca ttg att tca aca tct ttc ttg caa ga  
cta ata gca act ggg aat aat c

92/145



FRET

Set 8

h3A5 probe

h3A5 arrestor

h3A5 invader

h3A5 stacking oligo

SRT

FRET

aac gag gcg cac agt tga cct tc - NH2

**tga agg tca act gtg cgc**

gtg atg gcc agc aca ggg c

**ata cgt tcc cca cat ttt tc**

1317  
1318  
1319  
1320

Set 1

h3A7 Probe

h3A7 Invader

Capture Oligo

tgg cgt atc tgg att aaa tct taa aag

gac ttt tat tga gag aac gaa tgg atc taa a

1321  
1322

Set 2

h3A7 Primary Probe

h3A7 Invader

h3A7 Arrestor

SRT

FRET

AACGAGGCGCACTGGATTAAATCTTAAAG

gac ttt tat tga gag aac gaa tgg atc taa a

**CTTTAAGATTATAATCCAGTGCG-NH2**

1323  
1324  
1325

Set 3

h3A7 Primary Probe

h3A7 Invader

h3A7 Arrestor

h3A7 Stacking Oligo

SRT

FRET

AACGAGGCGCACTGGATTAAATCTTAAAG

gac ttt tat tga gag aac gaa tgg atc taa a

**CTTTAAGATTATAATCCAGTGCG-NH2**

**ctt ctt ggt gtt ttc ca**

1326  
1327  
1328  
1329

Set 4

h3A7 Probe

h3A7 Invader oligo

Capture Oligo

agg agc cac tca tcc ctt gac t

ctt agg gaa atc agg ctc cac tta cgg ta

1330  
1331

Set 5/Set 6

h3A7 Primary Probe

h3A7 Primary Probe

h3A7 Arrestor

h3A7 Invader oligo

AACGAGGCGCACCTCATCCCTTGACT

AACGAGGCGCACCTCATCCCTTGACT-NH2

**AGTCAAGGGAIGAGGIGCG-NH2**

ctt agg gaa atc agg ctc cac tta cgg ta

1332  
1333  
1334  
1335

93/145

SRT  
FRET

Set 7 - Set 10

h3A7 Primary Probe  
h3A7 Arrestor  
h3A7 Invader oligo  
h3A7 Stacking Oligo  
h3A7 Stacking Oligo  
h3A7 Stacking Oligo  
h3A7 Stacking Oligo

aac gag gcg cac ctc atc cct tga c-NH2  
**gtc aag gga tga ggt cgc c-NH2**  
ctt agg gaa atc agg ctc cac tta cgg ta  
tca gcc ttt aga aca atg ggt ttt tct gtt ag3'  
**tca gcc ttt aga aca atg ggt ttt tct g**  
**ctc agc** ctt tag aac aat ggg ttt ttc t  
**ctc agc ctt tag aac aat ggg ttt ttc t**

1336  
1337  
1338  
1339  
1340  
1341  
1342

SRT  
FRET

Set 11

h3A7 Primary Probe  
h3A7 Primary Probe  
h3A7 Arrestor  
h3A7 Invader oligo  
h3A7 Stacking Oligo

aac gag gcg cac ctc atc cct tga-NH2  
aac gag gcg cac ctc atc cct tga c  
**tca agg gat gag gtc cgc-NH2**  
ctt agg gaa atc agg ctc cac tta cgg ta  
ctc agc ctt tag aac aat ggg ttt ttc tgt tag

1343  
1344  
1345  
1346  
1347

SRT  
FRET

Set 1

h3A7 Probe  
h3A7 Invader  
Capture Sequence

ata cgg ttg gla aag taa ttt gag gt  
gaa gcc cgt ctt cat ttc agg gtt cta ttt c

1348  
1349

Set 2

h3A7 Primary Probe  
h3A7 Invader  
h3A7 Arrestor

AACGAGGCGCACGTAAAGTAATTTGAGGT  
gaa gcc cgt ctt cat ttc agg gtt cta ttt c  
**ACCICAAATTACTTTACGIGCG-NH2**

1350  
1351  
1352

SRT  
FRET

Set 3

h3A7 Primary Probe  
h3A7 Invader  
h3A7 Arrestor  
h3A7 Stacking Oligo

AACGAGGCGCACGTAAAGTAATTTGAGGT  
gaa gcc cgt ctt cat ttc agg gtt cta ttt c  
**ACCICAAATTACTTTACGIGCG-NH2**  
**ctc tgg tgt tct ggg**

1353  
1354  
1355  
1356

94/145

SRT  
FRET

Set 1

h3A7 probe  
h3A7 arrestor  
h3A7 invader  
h3A7 stacking oligo

SRT  
FRET

1357  
1358  
1359  
1360

Set 2 - Set 4

h3A7 probe  
h3A7 probe  
h3A7 probe  
h3A7 arrestor  
h3A7 invader  
h3A7 stacking oligo

SRT  
FRET

1361  
1362  
1363  
1364  
1365  
1366

Set 1

h3A7 probe  
h3A7 arrestor  
h3A7 invader  
h3A7 stacking oligo

SRT  
FRET

1367  
1368  
1369  
1370

Set 2

h3A7 probe  
h3A7 arrestor  
h3A7 invader  
h3A7 stacking oligo

SRT  
FRET

1371  
1372  
1373  
1374

Set 1

h3A7 probe  
h3A7 arrestor

SRT  
FRET

1375  
1376

95/145

1377  
1378

h3A7 invader  
h3A7 stacking oligo  
SRT  
FRET

gga aat cag gct cca ctt acg gtc a  
act cag cct tta gaa caa tg

1379  
1380  
1381  
1382

Set 1  
h3A7 probe  
h3A7 arrestor  
h3A7 invader  
h3A7 stacking oligo  
SRT  
FRET

cog tca cgc ctc taa agt aat ttg agg tc -NH2  
gac ctc aaa tta ctt tag agg cg  
cgt ctt cat ttc agg gtt cta ttt ga  
tct ggt gtt ctg gg

1383  
1384  
1385  
1386

Set 2  
h3A7 probe  
h3A7 arrestor  
h3A7 invader  
h3A7 stacking oligo  
SRT  
FRET

aac gag gcg cac taa agt aat ttg agg tc - NH2  
gac ctc aaa gga ctt tag tgc gc  
cgt ctt cat ttc agg gtt cta ttt ga  
tct ggt gtt ctg gg

1387  
1388

Set 1  
r4A1 Probe  
r4A1 Invader  
Capture Sequence

tgg-cgt-atc-tag-gct-ttg-ctt-cc  
ttc atg tag tca ggg tca tag aca att aag a

1389  
1390  
1391  
1392

Set 2  
r4A1 Primary Probe  
r4A1 Arrestor  
r4A1 Arrestor  
r4A1 Invader  
FRET Probe 1

AACGAGGCGCAC TAGGCTTTGCTTCC  
GGAAGCAAAGCCTAGTGCG-NH2  
gga agc aaa gcc tag tgc gc-NH2  
ttc atg tag tca ggg tca tag aca att aag a

1393  
1394  
1395

Set 3  
r4A1 Primary Probe  
r4A1 Arrestor  
r4A1 Invader  
SRT  
FRET Probe 1

aac gag gcg cac tag gct ttg ctt ccc-NH2  
ggg aag caa agc cta gtc cgc-NH2  
ttc atg tag tca ggg tca tag aca att aag a

Set 4  
 r4A1 Primary Probe aac gag gcg cac tag gct ttg ctt c-NH2  
 r4A1 Arrestor gaa gca aag cct agt gcg c  
 r4A1 Stackers ccc aga acc atc gag gaa agg c  
 r4A1 Invader ttc atg tag tca ggg tca tag aca att aag a  
 SRT  
 FRET Probe 1

Set 5  
 r4A1 Primary Probe aac gag gcg cac tag gct ttg ctt-NH2  
 r4A1 Arrestor aag caa agc cta gtg cgc-NH2  
 r4A1 Invader ttc atg tag tca ggg tca tag aca att aag a  
 r4A1 Stackers ccc cag aac cat cga gga aag g  
 r4A1 Stackers ccc cag aac cat cga gga aag g  
 SRT  
 FRET Probe 1

Set 6  
 r4A1 Primary Probe aac gag gcg cac tag gct ttg ct-NH2  
 r4A1 Primary Probe aac gag gcg cac tag gct ttg ct - HEX  
 r4A1 Probe aac gag gcg cac tag gct ttg ct  
 r4A1 Arrestor agc aaa gcc tag tgc gc-NH2  
 r4A1 Arrestor agc aaa gcc tag tgc gc  
 r4A1 Invader ttc atg tag tca ggg tca tag aca att aag a  
 r4A1 Stackers tcc cca gaa cca tgc agg aaa gg  
 r4A1 Stackers tcc cca gaa cca tgc agg aaa gg  
 SRT  
 FRET Probe 1

Set 1  
 r4A1 Probe ata cgg ttg gtc ttg acc tgc c  
 r4A1 Invader agg aga tat gtt gaa aga ttt cta tag agg ac  
 Capture Sequence

Set 2  
 r4A1 Primary Probe AACGAGGGCAGCTCTTGACCTGCC  
 r4A1 Arrestor GGCAGGTCAGACGTGCG-NH2  
 r4A1 Invader agg aga tat gtt gaa aga ttt cta tag agg ac

SRT				
FRET Probe 1				
Set 3		AACGAGGGCACGTCTTGACCCTGC-Pi <u>GGCAGGTCAAAGACGTTGCCG-NH2</u> agg aga tat gtt gaa aga ttt cta tag agg ac		1418 1419 1420
r4A1 Primary Probe				
r4A1 Arrestor				
r4A1 Invader				
SRT				
FRET Probe 1				
Set 1	tgg cgt atc tta gat gga gta agg a att cct cat aat tca aaa ggg act tag tag gt			1421 1422
r4A1 Probe				
r4A1 Invader				
Set 2	AACGAGGGCGCACTTAGATGGAGTAAGGA <u>ICCTTACTCCAICTAAGTGCCG-NH2</u>			1423 1424
r4A1 Primary Probe				
r4A1 Arrestor				
SRT				
FRET Probe 1				
Set 1	aac gag gcg cac tgg ata ccc ttg gg-NH2 <u>ccc.aag.ggt.atc.cag.tgc.gc-NH2</u> ggt gga gac cat aaa tgg aga gtg tga cta			1425 1426 1427
r4A1 Primary Probe				
r4A1 Arrestor				
r4A1 Invader				
SRT				
FRET Probe 1				
Set 1	aac gag gcg cac agg tgt ctg gag taa aag-NH2 <u>ctt.tta.ctc.cag.aca.cct.gtg.cgc-NH2</u> gtc cac gca caa gct ggg ac			1428 1429 1430
r4A2 Probe				
r4A2 Arrestor				
r4A2 Invader				
SRT				
FRET Probe 1				
Set 1	aac gag gcg cac aga agg ccc ctt-NH2 <u>aag.ggg.cct.tct.gtg.cgc-NH2</u> cct tga aca gca cca gaa ata gac tga gca c gga aga acc cag aga cac cat cc			1431 1432 1433 1434
r4A2 Probe				
r4A2 Arrestor				
r4A2 Invader				
r4A2 stacking oligo				
SRT				

98/145

FRET Probe 1

Set 2

r4A2 Probe  
r4A2 Arrestor  
r4A2 Invader  
SRT  
cgc tca cgc ctc aga agg ccc ctt-NH2  
aag ggg cct tct gag gcg-NH2  
cct tga aca gca cca gaa ata gac tga gca c

1435  
1436  
1437

FRET Probe 1

Set 3

r4A2 Probe  
r4A2 Arrestor  
r4A2 Invader  
SRT  
aac gag gcg cac aga agg ccc ctt g-NH2  
caa ggg gcc ttc tgt gcg c-NH2  
cct tga aca gca cca gaa ata gac tga gca c

1438  
1439  
1440

FRET Probe 1

Set 4

r4A2 Probe  
r4A2 Probe  
r4A2 Probe  
r4A2 Arrestor  
r 4A2 Arrestor  
r4A2 Invader  
SRT  
aac gag gcg cac aga agg ccc ctt gg-NH2  
aac gag gcg cac aga agg ccc ctt  
aac gag gcg cac aga agg ccc ctt - HEX  
cca agg ggc ctt ctg tgc gc-NH2  
aag ggg cct tct gtg cgc  
cct tga aca gca cca gaa ata gac tga gca c

1441  
1442  
1443  
1444  
1445  
1446

FRET Probe 1

Set 1

r4A3 Probe  
r4A3 Arrestor  
r4A3 Invader  
SRT  
aac gag gcg cac ttg aca gag tcc gc-NH2  
gcg gac tct gtc aag tgc gc-NH2  
gct tct ccc att tgt cta gca tta taa

1447  
1448  
1449

FRET Probe 1

Set 2

r4A3 Probe  
r4A3 Arrestor  
r4A3 Invader  
r4A3 stacking oligo  
SRT  
aac gag gcg cac ttg aca gag tcc g-NH2  
cgg act ctg tca agt gcg c-NH2  
gct tct ccc att tgt cta gca tta taa  
cca tga ttg tga cat agg gtt tga gga tg

1450  
1451  
1452  
1453

FRET Probe 1

99/145

Set 3

r4A3 Probe  
 r4A3 Probe  
 rCYP 4A3 Probe  
 r4A3 Arrestor  
 rCYP 4A3 Arrestor  
 r4A3 Invader  
 r4A3 stacking oligo  
 SRT  
 FRET Probe 1

1454  
 1455  
 1456  
 1457  
 1458  
 1459  
 1460

Set 1

r2B1 probe  
 r2B1 invader  
 Capture Sequence

1461  
 1462

Set 2/ Set 3

r2B1 probe  
 r2B1 probe  
 r2B1 invader  
 Capture Sequence

1463  
 1464  
 1465

Set 4

r2B1 probe  
 r2B1 invader  
 Capture Sequence

1466  
 1467

Set 5 - Set 7

r2B1 probe  
 r2B1 arrestor  
 r2B1 arrestor  
 r2B1 arrestor  
 r2B1 invader  
 SRT  
 FRET

1468  
 1469  
 1470  
 1471  
 1472

Set 8

r2B1 probe

1473

100/145



1474  
1475  
1476

**ttg-atg-acc-gca-ggt-gcg-cc-Pi**  
tgg ata act gca tca gtg tat ggc att tta a  
ggg ttg gta gcc tgt gtg agc cga t

r2B1 arrestor  
r2B1 invader  
r2B1 stacker  
SRT  
FRET

1477  
1478  
1479

aac-gag-gcg-cac-ctg-cgg-tca-tca-a-NH2  
**ttg-atg-acc-gca-ggt-gcg-NH2**  
tgg ata act gca tca gtg tat ggc att tta a

Set 9  
r2B1 probe  
r2B1 arrestor  
r2B1 invader  
SRT  
FRET

1480  
1481  
1482

ggc-aac-gag-gca-cac-ctg-cgg-tca-tca-ag-Pi  
**ttg-atg-acc-gca-ggt-gcg-cc-Pi**  
tgg ata act gca tca gtg tat ggc att tta a

Set 10  
r2B1 probe  
r2B1 arrestor  
r2B1 invader  
SRT  
FRET

1483  
1484  
1485

aac gag ggg cac ctg cgg tca tca ag-NH2  
ctt gat gac cgc agg tgc c-NH2  
tgg ata act gca tca gtg tat ggc att tta a

Set 11  
r2B1 probe  
r2B1 arrestor  
r2B1 invader  
SRT  
FRET

1486  
1487  
1488

aac gag gcg cac ctg cgg tca tca agg-NH2  
**cct tga tga ccg cag gtg cg-NH2**  
tgg ata act gca tca gtg tat ggc att tta a

Set 12  
r2B1 probe  
r2B1 arrestor  
r2B1 invader  
SRT  
FRET

1489  
1490  
1491

alg acg tga cag acc tgc ggt cat caa g-NH2  
**ctt gat gac cgc agg tct gt-NH2**  
tgg ata act gca tca gtg tat ggc att tta a

Set 13  
r2B1 probe  
r2B1 arrestor  
r2B1 invader  
SRT  
FRET

101/145

Set 14

r2B1 probe  
r2B1 arrestor  
r2B1 invader  
SRT  
FRET

aac gag gcg cac ctg agg tca tca a-NH2  
**ttg atg acc tca ggt gcg-NH2**  
tgg ata act gca tca gtg tat ggc att tta a

1492  
1493  
1494

Set 15

r2B1 probe  
r2B1 arrestor  
r2B1 invader  
SRT  
FRET

cag tca cgt ctg ctg cgg tca tca ag-NH2  
**ctt gat gac cgc agg aga cg-NH2**  
tgg ata act gca tca gtg tat ggc att tta a

1495  
1496  
1497

Set 16

r2B1 probe  
r2B1 invader  
r2B1 arrestor  
SRT  
FRET

cag tca cgt ctg act gcg gtc atc aag-NH2  
gtg gat aac tgc atc agt gta tgg cat ttt c  
**ctt gat gac cgc agt gag acg-NH2**

1498  
1499  
1500

Set 17

r2B1 probe  
r2B1 arrestor  
r2B1 invader  
r2B1 stacker  
SRT  
FRET

cag tca cgt ctg act gcg gtc atc aa-NH2  
**ttg atg acc gca gtg aga cg-NH2**  
gtg gat aac tgc atc agt gta tgg cat ttt c  
ggg ttg gta gcc tgt gtg agc cga t

1501  
1502  
1503  
1504

Set 18

r2B1 probe  
r2B1 arrestor  
r2B1 invader  
r2B1 stacker  
SRT  
FRET

cag tca cgt ctg act gcg gtc atc a-NH2  
**tga tga ccg cag tga gac g-NH2**  
gtg gat aac tgc atc agt gta tgg cat ttt c  
agg gtt ggt agc ctg tgt gag ccg a

1505  
1506  
1507  
1508

Set 19

r2B1 probe

cag tca cgt ctg act gcg gtc atc aag-NH2

1509

1510  
1511  
1512

ctt gat gac cgc agt gag acg-NH2  
gtg gat aac tgc atc agt gta tgg cat ttt c  
ggg tgg tag cct gtg tga gcc gat c

r2B1 arrestor  
r2B1 invader  
r2B1 stacker  
SRT  
FRET

1513  
1514  
1515  
1516

cag tca cgt ctc act gcg gtc atc-NH2  
atg acc gca gtg aga cg-NH2  
gtg gat aac tgc atc agt gta tgg cat ttt c  
caa ggg ttg gta gcc tgt gtg agc c

Set 20  
r2B1 probe  
r2B1 arrestor  
r2B1 invader  
r2B1 stacker  
SRT  
FRET

1517  
1518  
1519  
1520

ccg tca cgc ctc act gcg gtc atc a-NH2  
tga tga cgc cag tga ggc g-NH2  
gtg gat aac tgc atc agt gta tgg cat ttt c  
agg gtt ggt agc ctg tgt gag ccg a

Set 21  
r2B1 probe  
r2B1 arrestor  
r2B1 invader  
r2B1 stacker  
SRT  
FRET

1521  
1522  
1523  
1524

ccg tca cgc ctc act gcg gtc atc-NH2  
gat gac cgc agt gag gcg-NH2  
gtg gat aac tgc atc agt gta tgg cat ttt c  
aag ggt tgg tag ccg gtg tg

Set 22  
r2B1 probe  
r2B1 arrestor  
r2B1 invader  
r2B1 stacker

1525  
1526  
1527  
1528  
1529

ccg tca cgc ctc act gcg gtc atc-NH2  
ccg tca cgc ctc act gcg gtc at  
atg acc gca gtg agg cg-NH2  
gtg gat aac tgc atc agt gta tgg cat ttt c  
caa ggg ttg gta gcc tgt gtg agc c

Set 23  
r2B1 probe  
r2B1 probe  
r2B1 arrestor  
r2B1 invader  
r2B1 stacker  
SRT  
FRET

1530  
1531

---

Set 1  
r2B1 invader  
r2B1 probe  
atg gtg tct ttg gtg act ctg tgt ggt aca  
aac-gag-gcg-cac-tcc-aat-agg-gac-aag

1532

ctt-gtc-cct-att-gga-gtg-cgc-c

r2B1 arrestor  
SRT  
FRET

Set 1

gcg gcg tac agc cgg tgt gag c  
cat tt act gcg gtc atc aag ggt tgg tc

Capture Sequence

1533  
1534

Set 1

tgg cgt atg agc cgg tgt gag c  
cat tt act gcg gtc atc aag ggt tgg tc

Capture Sequence

1535  
1536

Set 1

gga tga ctg cat cag tgt atg gca tt tgc  
aac-gag-gcg-cac-gta-tca-tca-agg  
cct-tga-tga-tcg-tac-gtg-cgc-c-NH2

r2B2 invader  
r2B2 probe  
r2B2 arrestor  
SRT  
FRET

1537  
1538  
1539

Set 1

atg gtg tct ttg gtg act ctg tgt ggt aac  
tgg cgt atg acc aat tgg ggc aa  
gat ctg caa atc tct gaa tct cgt gga tg  
tct tgg aga gca ggt acc ctg gga ac

r2B2 invader  
r2B2 probe  
r2B2 stacker  
r2B2 invader stacker

1540  
1541  
1542  
1543

Set 2

tgg cgt atg acc aat tgg ggc aag  
atg gtg tct ttg gtg act ctg tgt ggt aac  
atc tgc aaa tct ctg aat ctg gtc gat ga  
tct tgg aga gca ggt acc ctg gga ac

r2B2 probe  
r2B2 invader  
r2B2 stacker  
r2B2 invader stacker

1544  
1545  
1546  
1547

Set 3

aac-gag-gcg-cac-acc-aat-tgg-ggc-aag  
aac gac gcg cac acc aat tgg ggc aag  
cct-gcc-cca-att-ggt-gtg-cgc-c-NH2  
atg gtg tct ttg gtg act ctg tgt ggt aac

r2B2 probe  
r2B2 probe  
r2B2 arrestor  
r2B2 invader  
SRT  
FRET

1548  
1549  
1550  
1551

104/145

Set 4

r2B2 probe  
r2B2 arrestor  
r2B2 invader  
SRT  
FRET

aac-gag-gcg-cac-acc-aat-tgg-ggc-aag-Pi  
**ctt-gcc-cca-att-ggt-gtg-cgc-c-Pi**  
atg gtg tct ttg gtg act ctg tgt ggt aac

1552  
1553  
1554

Set 5

r2B2 arrestor  
r2B2 probe  
r2B2 invader  
r2B2 stacker  
SRT  
FRET

**ctt gcc cca att ggt gtg cg-NH2**  
aac-gag-gcg-cac-acc-aat-tgg-ggc-aag-NH2  
atg gtg tct ttg gtg act ctg tgt ggt aac  
atc tgc aaa tct ctg aat ctc gtg gat ga

1555  
1556  
1557  
1558

Set 6

r2B2 probe  
r2B2 arrestor  
r2B2 invader  
SRT  
FRET

ggc-aac-gag-gca-cac-aa-ttg-ggg-caa-g  
**ctt-gcc-cca-att-ggt-gtg-cgc-c-NH2**  
atg gtg tct ttg gtg act ctg tgt ggt aac

1559  
1560  
1561

Set 7

r2B2 probe  
r2B2 arrestor  
r2B2 invader  
SRT  
FRET

aac gag gcg cac acc aat tgg ggc aag atc-NH2  
**gat ctt gcc cca att ggt gtg cg-NH2**  
atg gtg tct ttg gtg act ctg tgt ggt aac

1562  
1563  
1564

Set 8

r2B2 probe  
r2B2 arrestor  
r2B2 invader  
r2B2 stacker  
SRT  
FRET

aac gag gcg cac acc aat tcg ggc aag-NH2  
**ctt gcc cga att ggt gtg cg-NH2**  
atg gtg tct ttg gtg act ctg tgt ggt aac  
atc tgc aaa tct ctg aat ctc gtg gat ga

1565  
1566  
1567  
1568

Set 9

r2B2 probe

cag tca cgt ctc atg gtg gcc tgt g-NH2

1569

1570  
1571

gta tgg cat ttt ggt acg atc atc aag ggc  
cac agg cca cca tga gac g-NH2

r2B2 invader  
r2B2 arrestor  
SRT  
FRET

1572  
1573  
1574  
1575

cag tca cgt ctc aga gcc aat cac ctg-NH2  
cga tca tca agg gat ggt ggc ctg tgc  
cag ctg att ggc tct gag acg-NH2  
atc aat ctc ctt ttg gac ttt ctc tgc g

Set 10  
r2B2 probe  
r2B2 invader  
r2B2 arrestor  
r2B2 stacker  
SRT  
FRET

1576  
1577  
1578  
1579

cag tca cgt ctc aga gcc aat cac ct-NH2  
cga tca tca agg gat ggt ggc ctg tgc  
agg tga ttg gct ctg aga cg-NH2  
gat caa tct cct ttt gga ctt tct ctg c

Set 11  
r2B2 probe  
r2B2 invader  
r2B2 arrestor  
r2B2 stacker  
SRT  
FRET

1580

FAM-cag tca cgt ctc aga gcc aat cac ct-NH2

Set 12  
r2B2 probe

1581  
1582  
1583  
1584  
1585

cag tca cgt ctc aga gcc aat cac c-NH2  
ggt gat tgg ctc tga gac g-NH2  
cga tca tca agg gat ggt ggc ctg tgc  
gat caa tct cct ttt gga ctt tct ctg c  
tga tca atc tcc ttt tgg act ttc tct gc

Set 13 / Set 14  
r2B2 probe  
r2B2 arrestor  
r2B2 invader  
r2B2 stacker  
r2B2 stacker  
SRT  
FRET

1586  
1587  
1588  
1589

cag tca cgt ctc aga gcc aat cac-NH2  
gtg att ggc tct gag acg-NH2  
ctg atc aat ctc ctt ttg gac ttt ctc tgc g  
cga tca tca agg gat ggt ggc ctg tgc

Set 15  
r2B2 probe  
r2B2 arrestor  
r2B2 stacker  
r2B2 invader  
SRT  
FRET

106/145

Set 16

r2B2 probe  
r2B2 arrestor  
r2B2 invader  
r2B2 stacker  
SRT  
FRET

cag tca cgt ctc aga gcc aat cac ct-NH2  
**agg tga ttg cct ctg aga cg-NH2**  
cga tca tca agg gat ggt gcc ctg tgc  
gat caa tct cct ttg gga ctt tct ctg c

1590  
1591  
1592  
1593

Set 17

r2B2 probe  
r2B2 arrestor  
r2B2 invader  
r2B2 stacker  
SRT  
FRET

cag tca cgt ctc aga gcc aat cac ctg-NH2  
**cag gtg att gcc tct gag acg-NH2**  
cga tca tca agg gat ggt gcc ctg tgc  
atc aat ctc ctt ttg gac tt ctc tgc g

1594  
1595  
1596  
1597

Set 18

r2B2 probe  
r2B2 arrestor  
r2B2 invader  
r2B2 stacker  
SRT  
FRET

ccg tca cgc ctc aga gcc aat cac ct-NH2  
**agg tga ttg gct ctg agg cg-NH2**  
cga tca tca agg gat ggt gcc ctg tgc  
gat caa tct cct ttg gga ctt tct ctg c

1598  
1599  
1600  
1601

Set 19

r2B2 probe  
r2B2 arrestor  
r2B2 invader  
r2B2 stacker  
SRT  
FRET

ccg tca cgc ctc aga gcc aat cac c-NH2  
**ggt gat tgg ctc tga gcc g-NH2**  
cga tca tca agg gat ggt gcc ctg tgc  
tga tca atc tcc ttg gga act ttc tct gc

1602  
1603  
1604  
1605

Set 20-21

r2B2 probe  
r2B2 probe  
r2B2 arrestor  
r2B2 invader  
r2B2 stacker

ccg tca cgc ctc aga gcc aat cac-NH2  
ccg tca cgc ctc aga gcc aat cac  
**gtg att gcc tct gag gcc-NH2**  
cga tca tca agg gat ggt gcc ctg tgc  
**ctg** atc aat ctc ctt ttg gac tt ctc tgc g

1606  
1607  
1608  
1609  
1610

107/145

Set 22

cag tca cgt ctc atg gtc aaa gta ctg tgg-NH2  
gga agt gct cag gat tga agg tgt ctg gc  
cca cag tac ttt gac cat gag acg-NH2  
SRT  
FRET

1611  
1612  
1613

Set 23

aac gag gcg cac atg gtc aaa gta ctg tgg-NH2  
cca cag tac ttt gac cat gtc cgc-NH2  
gga agt gct cag gat tga agg tgt ctg gc  
SRT  
FRET

1614  
1615  
1616

r2B2 probe  
r2B2 invader

cat acg gtt ggg cct gtc aga gc  
cat ttt ggt acg atc atc aag gga tgg tc

1617  
1618

r3A1 probe  
r3A1 probe  
r3A1 invader  
r3A1 probe  
r3A1 probe  
r3A1 arrestor  
r3A1 probe  
r3A1 probe  
r3A1 arrestor  
r3A1 arrestor  
r3A1 arrestor  
r3A1 arrestor  
r3A1 arrestor  
r3A1 arrestor  
r3A1 arrestor  
r3A1 arrestor  
r3A1 arrestor

agg agc cac ggg tcc caa atc  
FL-agg agc cac ggg tcc caa atc  
toc cct gtt tct tga aaa gtc cat gtc tga  
F-tcg cgt agt cgg gtc cca aat c  
cat-ctt-cgc-gga-cgg-gtc-cca-aat-c  
gat-ttg-gga-ccc-ggt-gcg-cc-NH2  
aac-gag-gcg-cac-cgg-gtc-cca-aat-c-NH2  
cat-ctt-cgc-gga-cgg-gtc-cca-aat-c - NH2  
gga ttt ggg acc cgt cgc cga - NH2  
gga-ttt-ggg-acc-cgt-cgc-cg -NH2  
gga ttt ggg acc cgt cgc c - NH2  
gga ttt ggg acc cgt cgc - NH2  
gat-ttg-gga-ccc-ggt-gcg-c-NH2  
gat-ttg-gga-ccc-ggt-gcg-NH2  
gat-ttg-gga-ccc-ggt-gc-NH2  
gat-ttg-gga-ccc-ggt-gcg-cct-NH2  
gat-ttg-gga-ccc-ggt-gcg-cct-c-NH2

1619  
1620  
1621  
1622  
1623  
1624  
1625  
1626  
1627  
1628  
1629  
1630  
1631  
1632  
1633  
1634  
1635

r3A1 probe  
r3A1 probe  
r3A1 probe

aac gag gcg cac cgg gtc cca aat c-Pi

1636



r3A1 invader	tcc cct gtt tct tga aaa gtc cat gtg tga	1637
r3A1 probe	aac gag gcg cac cgg gtc cca aat c-NH2	1638
r3A1 arrestor	<b>gat ttg gga ccc ggt gcg-NH2</b>	1639
r3A1 probe	aac gag gcg cac cgg gtc cca aat c-NH2	1640
r3A1 arrestor	<b>gga ttg ggg acc cgg tgc gc-NH2</b>	1641
r3A1 probe	aac gag gcg cac cgg gtc cca aat-NH2	1642
r3A1 arrestor	<b>att tgg gac ccg gtc gcg-NH2</b>	1643
r3A1 stacker	ccg tag agg agc acc agg acg	1644
r3A1 probe	aac gag gcg cac cgg gtc cca aa-NH2	1645
r3A1 arrestor	<b>ttt ggg acc cgg tgc gc-NH2</b>	1646
r3A1 stacker	tcc gta gag gag cac cag ga	1647
r3A1 probe	cag tca cgt ctc cgg gtc cca aa-NH2	1648
r3A1 arrestor	<b>ttt ggg acc cgg aga cg-NH2</b>	1649
r3A1 stacker	tcc gta gag gag cac cag ga	1650
r3A1 probe	ccg tca cgc ctc cgg gtc cca aa-NH2	1651
r3A1 arrestor	<b>ttt ggg acc cgg agg cg-NH2</b>	1652
r3A1 stacker	tcc gta gag gag cac cag ga	1653
r3A1 stacker	<b>tcc gta gag gag cac cag ga</b>	1654
r3A1 probe	aac gag gcg cac cgg gtc cca-NH2	1655
r3A1 arrestor	<b>tgg gac ccg gtc gcg-NH2</b>	1656
r3A1 probe	ccg tca cgc ctc cgg gtc cca-NH2	1657
r3A1 arrestor	<b>tgg gac ccg gag gcg-NH2</b>	1658
r3A1 stacker	aat ccg tag agg agc acc agg	1659
r3A1 probe	aac gag gcg cac cgg gtc cca	1660

r3A2 invader	ttc ctt gtt tct taa aaa ttc cat gtc taa	1661
r3A2 invader	att tt cga tac tt tta tag cac tcc atc	1662
r3A2 probe	tgg cgt atc tgg gtt cca agt c	1663
r3A2 probe	aac gag gcg cac gtc aaa tct ccc taa	1664
r3A2 probe	aac-gag-gcg-cac-tgg-gtt-cca-agt-c	1665
r3A2 arrestor	<b>tta ggg aga tt gac gtc gcg c - NH2</b>	1666
r3A2 arrestor	<b>gac-ttg-gaa-ccc-agt-gcg-cc-NH2</b>	1667
r3A2 probe	aac gag gcg cac tgg gtt cca agt c	1668
r3A2 probe	aac-gag-gcg-cac-tgg-gtt-cca-agt-c-Pi	1669
r3A2 arrestor	<b>gac ttg gaa ccc agt gcg-NH2</b>	1670
r3A2 probe	aac gag gcg cac tgg gtt cca agt cg-NH2	1671
r3A2 arrestor	<b>cga ctt gga acc cag tgc gc-NH2</b>	1672
r3A2 probe	aac gag gcg cac aac cat caa gtt cta ta-NH2	1673

r3A2 invader	gga atc gtc act act gac cct ttg ggt ata aac ac	1674
r3A2 stacker	tct ttt tta cag act ctc tca agt cta tta cc	1675
r3A2 arrestor	<b>tat aga act tga tgg ttg tgc gc-NH2</b>	1676
r3A2 probe	aac gag gcg cac aac cat caa gtt cta-NH2	1677
r3A2 stacker	tat ctt ttt tac aga ctc tct caa gtc tat tac c	1678
r3A2 arrestor	<b>tag aac ttg atg gtt gtt ggc-NH2</b>	1679
r3A2 probe	cag tca cgt ctc ctc ggc agg gc-NH2	1680
r3A2 invader	cac aat atc gta ggt agg agg tgc ctt aa	1681
r3A2 arrestor	<b>gcc ctg ccg agg aga cg-NH2</b>	1682
r3A2 probe	cag tca cgt ctc ctc ggc agg g-NH2	1683
r3A2 stacker	ccc cat cga tct cct cct g	1684
r3A2 arrestor	<b>ccc tgc cga gga gac g-NH2</b>	1685
r3A2 probe	cag tca cgt ctc ctc ggc agg ggc-NH2	1686
r3A2 stacker	gcc cca tgg atc tcc tcc	1687
r3A2 arrestor	<b>cct gcc gag gag acg-NH2</b>	1688
r3A2 probe	cag tca cgt ctc ctc ggc ag-NH2	1689
r3A2 stacker	ggc ccc atc gat ctc ctc	1690
r3A2 arrestor	<b>ctg ccg agg aga cg-NH2</b>	1691
r3A2 probe	ccg tca cgc ctc ctc ggc agg-NH2	1692
r3A2 arrestor	<b>cct gcc gag gag gcg-NH2</b>	1693
r3A2 stacker	<b>gcc</b> cca tgg atc tcc tcc	1694
r3A2 probe	ccg tca cgc ctc ctc ggc agg	1695
hICAM-1 probe	ccg tca cgc ctc ggc ttg tgt gtt c-NH2	1696
hICAM-1 invader	ccg gga tag gtt cag gga ggc gtc	1697
hICAM-1 stacker	<b>ggt ttc atg ggg gtc cct</b>	1698
hICAM-1 arrestor	<b>gaa cac aca agc cga ggc g</b>	1699
hVCAM-1 probe	ccg tca cgc ctc ggc ttt gtt tgg-NH2	1700
hVCAM-1 arrestor	<b>cca aac aaa ggc gag gcg</b>	1701
hVCAM-1 invader	ggg caa cat tga cat aaa gfg ttt gcg tac tct c	1702
hVCAM-1 stacker	<b>ggt cga att cca tgt cat c</b>	1703
hVCAM-1 probe	ccg tca cgc ctc ggc ttt gtt tg-NH2	1704
hVCAM-1 arrestor	<b>caa aca aag gcg agg cg</b>	1705
hVCAM-1 stacker	<b>ggt tgc aat tcc atg tca tc</b>	1706
hGAPDH probe	aac gag gcg cac gct cct gga aga tg-NH2	1707
hGAPDH arrestor	<b>cat ctt cca gga gcg tgc gcc-NH2</b>	1708

1709

hGAPDH invader      cac ttg att ttg gag gga tct ca

**Secondary system oligos**

Capture Oligo	aaa agt ggc tcc t-(biotin)c	1710
Capture Oligo	aaa aga ggc tcc gct-(biotin)c	1711
Capture Oligo	aaa atg tac gcc gct-(biotin) c	1712
Capture Oligo	aaa aga tac gcc aca gct-(biotin) c	1713
Capture Oligo	aaa acc aac cgt atg aac t-(biotin) c	1714
Capture Oligo	aaa atc ata cgc cac t-(biotin)c	1715
SRT	cgg-agg-aag-cag-ttg-gtg-tgc-ctc-gtt-gcc-tt-NH2	1716
SRT	cgg agg aag cag ttg gtg ccc ctc gtt aa-NH2	1717
SRT	cgg aag aag cag ttg gtg cgc ctc gtt aa-NH2	1718
SRT	cgg aag aag cag ttg gtg cgc ctc gtt aa-NH2	1719
SRT	cgg aag aag cag ttg gtg cgc ctc gtt aa	1720
SRT	cgg aag aag cag ttg gtg cgc ctc gtt aa	1721
SRT	cgg aag aag cag ttg gtg cgc ctc gtt aa	1722
SRT	cgg aag aag cag ttg gtg cgc ctc gtt aa	1723
SRT	cgg aag aag cag ttg gag gcg tga cgg t-NH2	1724
SRT	cgg aag aag cag ttg gag gcg tga cgg a-NH2	1725
SRT	cgg aag aag cag ttg gag gcg tga cgg a	1726
SRT	cgg aag aag cag ttg gag gcg tga cgg t	1727
SRT	cgg aag aag cag ttg gag gcg tga cgg t	1728
SRT	cgg aag aag cag ttg gag gcg tga cgg t	1729
FRET probe	FL-caa c(cy3)gc ttc ctc	1730
FRET probe	FL-caa c(cy3)gc ttc ctc c	1731
FRET probe	FL-caa-c(cy3)g-ctt-ctt-ccg	1732
FRET probe	FL-caa-c(cy3)g-ctt-ctt-ccg-uu	1733
FRET probe	FL-caa-c(cy3)g-ctt-ctt-ccg-uuu-u	1734
FRET probe	FL-caa-c(cy3)g-ctt-ctt-ccg-NH2	1735

111/145

Oligo sequence descriptions:

5' to 3' direction, 2'-Ome nts are bolded and underlined, internal modifications are defined in ( ), ASR of primary probes are underlined  
C18ddC = C18 linker+ddideoxy C, ddC = dideoxy C, FI = Fluorescein

Oligo Type	Oligo Sequence	SEQ ID NO
<b>HUMAN IL-2</b>		
Human IL-2 Probe	FI- CGAAATTAATACGCCIICTTGGGCAIGTAC -C18ddC	1736
Human IL-2 Probe	CGAAATTAATACGCCIICTTGGGCAIGTAC -C18ddC	1737
Human IL-2 Invader	CTGAAGATGTTTCAGTTCCTG- ddC	1738
Human IL-2 Invader	GAAGATGTTTCAGTTCCTG- ddC	1739
Human IL-2 Probe	TCAC TTCCTACCCIICTTGGGCAIGTAA	1740
Human IL-2 Probe	TCAC TTCCTACCCIICTTGGGCAIGTAAAC	1741
Human IL-2 Probe	TCAC TTCCTACCCIICTTGGGCAIGTAA -C18ddC	1742
Human IL-2 Invader	GAAGATGTTTCAGTTCCTG- ddC	1743
Human IL-2 Probe	FI- ACTTCCTACIIAATCCATTCAAAAATC	1744
Human IL-2 Probe	ACTTCCTACIIAATCCATTCAAAAATC - C18ddC	1745
Human IL-2 Invader	GAGTTGGGATTCCTGTAATTAT -ddC	1746
Human IL-2 Probe	FI- CGTGTCTGTGGCGTATCIIAATCCATTCAAAAATC	1747
Human IL-2 Probe	CGTGTCTGTGGCGTATCIIAATCCATTCAAAAATC	1748
Human IL-2 Invader	GAGTTGGGATTCCTGTAATTAT - ddC	1749
Human IL-2 Probe	FI- CGTGTCTGTGGCGTATCIIAATCCATTCAAAAATC	1750
Human IL-2 Probe	CGTGTCTGTGGCGTATCIIAATCCATTCAAAAATC	1751
Human IL-2 Probe	FI- CGTGTCTGTGGCGTATCIIAATCCATTCAAAAATC	1752
Human IL-2 Probe	CGTGTCTGTGGCGTATCIIAATCCATTCAAAAATC	1753
Human IL-2 Invader	GAGTTGGGATTCCTGTAATTAT -ddC	1754
<b>HUMAN β-ACTIN</b>		
Human β-actin Probe	FI-TTCCTACICTTGAATCTTCATTTGTGC	1755
Human β-actin Invader	CTCAGGAGGAGCAATGATCTT	1756
Human β-actin Invader	CTCAGGAGGAGCAATGAT	1757
Human β-actin Probe	FI-TCACTTCCTACTCTGGGTCATCTTCTCG -C18ddC	1758
Human β-actin Probe	TCAC TTCCTACTCTGGGTCATCTTCTCG -C18ddC	1759
Human β-actin Invader	GTGTTGAAGGTCCTCAAAACATGAT - ddC	1760
Human β-actin Invader	GGGTGTTGAAGGTCCTCAAAACATGAT - ddC	1761
Human β-actin Probe	FI- CGTGTCTGTGGCGTATCTGGGTCATCTTCTCG	1762
Human β-actin Probe	CGTGTCTGTGGCGTATCTGGGTCATCTTCTCG	1763
Human β-actin Invader	GGGTGTTGAAGGTCCTCAAAACATGAT - ddC	1764
<b>GAPDH</b>		
Human GAPDH Probe	FI- TTCATACGGTTGGTAGTTGAGGTCAATG	1765
Human GAPDH Probe	TTCATACGGTTGGTAGTTGAGGTCAATG	1766
Human GAPDH Invader	GGAATCATATTGGAACATGTAAACCATC	1767
Human GAPDH Probe	FI- TTCATACGGTTGGCTCCCTGGGAAGATG	1768

Human GAPDH Probe	TTCATACGGTTGGCICCTGGGAAGATG	1769
Human GAPDH Invader	CACTTGATTTTGGAGGGATCTCA	1770
Human/Mouse/Rat GAPDH Probe	TTCATACGGTTGGTAGTTGAGGTCATG	1771
Mouse/Rat GAPDH Invader	AGAATCATACTGGAACATGTAGACCATC	1772
Mouse GAPDH Probe	FI-TGGCGTATCAITAGTIIIGA	1773
Mouse GAPDH Probe	TGGCGTATCAITAGTIIIGA	1774
Mouse GAPDH Probe	GGAGTCATACTGGAACATGTAGACC	1775
Mouse GAPDH Invader	TGGCGTATCAITAGTIIIGA	1776
Mouse GAPDH Probe	AGTCATACTGGAACATGTAGACA	1777
Mouse GAPDH Invader	GGAGTCATACTGGAACATGTAGACA	1778
<b>MOUSE IL-6</b>		
Mouse IL-6 Probe	FI- TGGCGTATCICITIIICICATII	1779
Mouse IL-6 Probe	TGGCGTATCICITIIICICATII	1780
Mouse IL-6 Invader	ACAATCAGAAATTGCCATTGCACAACA	1781
<b>MOUSE ONCOSTATIN M</b>		
Mouse Oncostatin M Probe	FI-GAAGGCAGAGGACCCGIGAGGC	1782
Mouse Oncostatin M Probe	GAAGGCAGAGGACCCGIGAGGC	1783
Mouse Oncostatin M Invader	AAGACATCTGGTGTGTAGTGA	1784
Mouse Oncostatin M Probe	FI-TGGCGTATCICCCAGAGAAAAGC	1785
Mouse Oncostatin M Probe	TGGCGTATCICCCAGAGAAAAGC	1786
Mouse Oncostatin M Invader	CACTGAGCCGATGAAGCGATGGTAA	1787
Mouse Oncostatin M Probe	FI- TGGCGTATCAGGGCTCCAAAGAG	1788
Mouse Oncostatin M Probe	TGGCGTATCAGGGCTCCAAAGAG	1789
Mouse Oncostatin M Invader	GTGTTACAGTTTGGAGCGCGGATAA	1790
Mouse Oncostatin M Probe	FI-TGGCGTATCAGGGCTCCAAAG	1791
Mouse Oncostatin M Probe	TGGCGTATCAGGGCTCCAAAG	1792
Mouse Oncostatin M Invader	GTGTTACAGTTTGGAGCGCGGATAA	1793
FRET Probe	FI-ATTTC(CY3)TCTCAGA-3'NH2	1794
FRET Probe	FI-ATTTC(CY3)TCTCAGAC-3'NH2	1795
FRET Probe	FI-ATTTC(CY3)TCTCAGACT-3'NH2	1796
SRT	CAGTCTGAGATGAATGATACGCCAGG-3'NH2	1797
Mouse Oncostatin M Arrestor	<u>CTTGGAGCCCTAGATA-NH2</u>	1798
Mouse Oncostatin M Arrestor	<u>CTTGGAGCCCTAGAT-NH2</u>	1799
Mouse Oncostatin M Arrestor	<u>CTTGGAGCCCTAGA-NH2</u>	1800
Mouse Oncostatin M Probe	CTGGCGTATCTAGGGCTCCCA	1801
Mouse Oncostatin M Probe	CCTGGCGTATCTAGGGCTCCCA	1802
Mouse Oncostatin M Invader	GTGTTACAGTTTGGAGCGCGGATAA	1803
SRT	CAGTCTGAGATGAATGATACGCCAGG-3'NH2	1804
Arrestor	<u>CTTGGAGCCCTAGAT-NH2</u>	1805
Mouse Oncostatin M Probe	FI-CTCTCTCTGCTCTIAGGGCTCCA	1806

Mouse Oncostatin M Probe	CTCTCTCGTCTCTAGGGCTCCCA	1807
Mouse Oncostatin M Invader	GTGTTTCAGGTTTTGGAGCGGGATAA	1808
SRT	CAGTCTGAGATGAATGAGACGAGAGAGT-NH2	1809
Mouse Oncostatin M Arrestor	CTTGGAGCCCTAGAG-NH2	1810
Mouse Oncostatin M Probe	FI- TGGCGTATCTAGGGCTCCCA	1811
Mouse Oncostatin M Probe	TGGCGTATCTAGGGCTCCCA	1812
Mouse Oncostatin M Invader	GTGTTTCAGGTTTTGGAGCGGGATAA	1813
Mouse Oncostatin M Probe	TGGCGTATCTAGGGCTCCCA	1814
Mouse Oncostatin M Probe	TGGCGTATCTAGGGCTCCCA	1815
Mouse Oncostatin M Invader	CACTGAGCCGATGAAGCGATGGTAA	1816
Mouse Oncostatin M Probe	TGGCGTATCTAGGGCTCCCA	1817
Mouse Oncostatin M Invader	GTGTTTCAGGTTTTGGAGCGGGATAA	1818
Mouse Oncostatin M Probe	CTCTCTCGTCTCTAGGGCTCCCA	1819
Mouse Oncostatin M Invader	GGCAGCTCTCAGGTCAGGTGTGA	1820
Mouse Oncostatin M Invader	AGGCAGCTCTCAGGTCAGGTGTGA	1821
SRT	CAGTCTGAGATGAATGAGACGAGAGAGT-NH2	1822
FRET Probe	FI-ATTTC(CY3)TCTCAGAC-3'NH2	1823
Mouse Oncostatin M Arrestor	CAAAACCTGAAGAGA-3'NH2	1824
Mouse Oncostatin M Arrestor	CAAAACCTGAAGAGA-3'NH2	1825
Mouse Oncostatin M Arrestor	CAAAACCTGAAGAGA-3'NH2	1826
Mouse Oncostatin M Probe	FI- CTCTCTCGTCTCTCAGGTTTG	1827
Mouse Oncostatin M Probe	CTCTCTCGTCTCTCAGGTTTG-NH2	1828
Mouse Oncostatin M Invader	GGCAGCTCTCAGGTCAGGTGTGA	1829
Mouse Oncostatin M Stacker	GAGCGGATATAGGGCT- Biotin TEG	1830
<b>HUMAN ONGOSTATIN M</b>		
Human Oncostatin M Probe	CTCTCTCGTCTCTCAGGACTTAA	1831
Human Oncostatin M Probe	CTCTCTCGTCTCTCAGGACTTAA	1832
Human Oncostatin M Invader	GAAACAGGAGTGAAGGACGAGACA	1833
Human Oncostatin M Probe	TCACGTCTCTCAGGTTTG	1834
Human Oncostatin M Probe	GTACAGTCTCTCAGGTTTG	1835
Human Oncostatin M Probe	AGTCACGTCTCTCAGGTTTG	1836
Human Oncostatin M Probe	CAGTCAGTCTCTCAGGTTTG	1837
Human Oncostatin M Probe	AGGCAGTCTCTCAGGTCAGGTGTGA	1838
Human Oncostatin M Invader	FI- CAAC(CY3)GCTTCCTCCG	1839
FRET Probe 1	CGGAGGAAGCAGTTGGAGACGTGACTGTGG-NH2	1840
SRT	CGGAAGAAGCAGTTGGAGACGTGACTGTGG-NH2	1841
SRT with mismatch	CGGACGAAGCAGTTGGAGACGTGACTGTGG-NH2	1842

114/145

bold indicates 2' o-methyl bases

Oligo Type	Oligo Sequence	Oligo #	SEQ ID NO
<b>SECONDARY SYSTEM:</b>			
<b>SET 1</b>			
FRET probe 1	5'-F-CAAC(CY3)GCTTCCTCCG-3'	DB04001F6	1843
secondary target	5'-CGGAAGAAGCAGTTGGTGCGCCTCGTTAA-NH2	649-10-01	1844
<b>SET 2</b>			
FRET probe 1	5'-F-CAAC(CY3)GCTTCCTCCG-3'	DB04001F6	1845
secondary target	5'-CGGAAGAAGCAGTTGGAGGCGTGACGGT-NH2-3'	641-60-03	1846
<hr/>			
h2C19 designs 2			
probe	5'-AACGAGGCGCACGATGCCATCGA-NH2-3'	971-26-09	1847
stacker	5'-TTCTGGTGTTCTTTACTTTCTC-3'	971-26-12	1848
invader	5'-GCAATCAATAAGTCCCGAGGGTTGTTCC	971-26-11	1849
arrestor	5'-TCGATGGACATCGTGCGC-3'	971-26-10	1850
SET 1			
h 2D6 p450 designs			
probe	5'-CCGTCACGCCCTCTCACCCATCT-NH2-3'	971-11-01	1851
stacker	5'-CTGGTCGCCGACCT-3'	971-11-04	1852
invader	5'-TGTAGGGCATGTGAGCCTGGA-3'	971-11-03	1853
arrestor	5'-AGATGGGAGAGAGGCG-3'	971-11-02	1854
SET 2			
probe	5'-CCGTCACGCCCTCGAAGCCCTGT-NH2-3'	971-11-05	1855
stacker	5'-ACTTCGATGTCACGGGATGTCATATGG-3'	971-11-08	1856
invader	5'-GAGTGTCTGTTCCCTTAGGGATGCGC-3'	971-11-08	1857
arrestor	5'-ACAGGGCTTCGAGGCG-3'	971-11-06	1858
SET 2			
probe	5'-CCGTCACGCCCTCCCTGCTGAGAAAG-NH2-3'	971-11-09	1859
stacker	5'-GCAGGAAGGCCCTCCG-3'	971-11-12	1860
invader	5'-CCCGAGGCATGCACGGCGGA-3'	971-11-11	1861
arrestor	5'-CTTTCTCAGCAGGGAGGCG-3'	971-11-10	1862
SET 2			

115/145

h 2D6 shroter designs

probe 1051-12-06 1863  
 probe 1051-12-05 1864  
 probe 971-38-01 1865  
 invader 971-11-11 1866  
 stacker 971-38-03 1867  
 arrestor 971-38-02 1868  
 SET 2

5'-CCGTCACGCCCTCCCTGCTGAGAA-NH2-3' 1869  
 probe 971-38-07  
 invader 971-11-11  
 stacker 971-38-09 1870  
 arrestor 971-38-08 1871  
 SET 2

5'-CCGTCACGCCCTCCCTGCTGAGAA-NH2-3' 1872  
 probe 971-38-04  
 invader 971-11-11  
 stacker 971-38-06 1873  
 arrestor 971-38-05 1874  
 SET 2

5'-CCGTCACGCCCTCCCTGCTGAGAA-NH2-3' 1875  
 probe 971-11-09  
 invader 971-11-11  
 stacker 971-11-12 1876  
 arrestor 971-11-10 1877  
 SET 2

h 2B6 p450 alt. Splice designs

5'-AACGAGGCGCACCATATCCC-NH2-3' 1878  
 probe 1051-48-01  
 invader 971-01-03 1879  
 stacker 971-01-04 1880  
 arrestor 1051-48-02 1881  
 SET 1

5'-CCGTCACGCCCTCCACCATATCCC-HEX-3' 1882  
 probe 1051-12-02  
 probe 1051-12-01 1883  
 probe 971-01-01 1884  
 invader 971-01-03  
 stacker 971-01-04  
 arrestor 971-01-02 1885

116/145



SET 2

probe  
invader  
stacker  
arrestor  
SET 1

1886  
1887  
1888  
1889

1051-48-03  
971-01-10  
971-01-11  
1051-48-04

5'-AACGAGGGCACCAGAGCTGATGAG-NH2-3'  
5'-GAGAAAGAGCTCAAACAGCTGGCCGAATAA-3'  
5'-TGAAAAAGTCTGGTAGAACAAAGTTCAGC-3'  
5'-CTCATCAGCTCTGGTGCGC-3'

probe

1890

971-01-08  
971-01-10  
971-01-11  
971-01-09

5'-CCGTCACGCCCTCCAGAGCTGATGAG-NH2-3'

1891

5'-CTCATCAGCTCTGGAGGCG-3'

SET 2

h 2B6 p450 alt.splice designs2

p  
l  
s  
a  
SET 1

1892  
1893  
1894  
1895

1051-48-05  
1051-48-10  
1051-48-09  
1051-48-06

5'-AACGAGGGCGCACCCCTTGGATTTTC-NH2-3'  
5'-CTGTTCAATCTCCCTGTAGACTCTCTA-3'  
5'-CGAAGCTCCTCTATCAG-3'  
5'-GAAATCCAAGGGTGCGC-3'

1896

1051-48-07  
1051-48-10  
1051-48-09  
1051-48-08

5'-CCGTCACGCCCTCCCTTGGATTTTC-NH2-3'

1897

5'-GAAATCCAAGGGAGGCG-3'

SET 2

1898  
1899  
1900  
1901

1051-48-11  
1051-48-16  
1051-48-15  
1051-48-12

5'-AACGAGGGCGCACTGAGGGCC-NH2-3'  
5'-GGAAGAGGAAGGTGGGTCCAA-3'  
5'-CCCTTGGATTTCCGAAG-3'  
5'-GGCCCTCAGTGCGC-3'

SET 1

1902

1051-48-13  
1051-48-16  
1051-48-15  
1051-48-14

5'-CCGTCACGCCCTCTGAGGGCC-NH2-3'

1903

5'-GGCCCTCAGAGGCG-3'

SET 2

h2B6 p450 alt. Splice designs4

117/145

probe	5'-AACGAGGGCGACAATACAGAGCTG-NH2-3'	1051-48-17	1904
invader	5'-GAGAAAGAGCTCAACAGCTGGCCGC-3'	1051-48-22	1905
stacker	5'-ATGAGTGAAAAAGTCTGGTAGAAC-3'	1051-48-21	1906
arrestor	5'-CAGCTCTGTATTGTGCGC-3'	1051-48-18	1907
SET 1			
probe	5'-CCGTCACGCCTCAATACAGAGCTG-NH2-3'	1051-48-19	1908
invader		1051-48-22	
stacker		1051-48-21	
arrestor	5'-CAGCTCTGTATTGAGGCG-3'	1051-48-20	1909
SET 2			
probe	5'-AACGAGGGCGCAGGTTGAGGTTCTG-NH2-3'	1051-48-23	1910
invader	5'-CAGCAAAGAGAGCGAGCGTGTGAC-3'	1051-48-28	1911
stacker	5'-GTGGCTGAATTCACCTGTG-3'	1051-48-27	1912
arrestor	5'-CAGAACCTCAACCGTGCGC-3'	1051-48-24	1913
SET 1			
probe	5'-CCGTCACGCCTCGGTTGAGGTTCTG-NH2-3'	1051-48-25	1914
invader		1051-48-28	
stacker		1051-48-27	
arrestor	5'-CAGAACCTCAACCGAGGCG-3'	1051-48-26	1915
SET 2			
h2B6 p450 designs			
probe	5'-CCGTCACGCCTCCACCATATCCCCG-NH2-3'	971-01-06	1916
invader	5'-CCGTCACGCCTCCACCATATCCC-NH2-3'	971-01-03	1917
stacker	5'-CGGAAGAATGGGTCGAC-3'	971-01-05	1918
stacker	5'-CGGAAGAATGGGTCGACCATG-3'	971-01-04	1919
arrestor	5'-GGGATATGGTGGAGGCG-3'	971-01-02	1920
SET 2			
probe	5'-CCAGCGGTTTCCATTGGCAAAGATCAA-3'	971-01-01	1921
invader		971-01-03	
arrestor	5'-CGGGGATATGGTGGAGGCG-3'	971-01-07	1922
SET 2			
probe	5'-CCGTCACGCCTCCAGAGCTGATGAG-NH2-3'	971-01-08	1923
invader	5'-GAGAAAGAGCTCAACAGCTGGCCGAATAA-3'	971-01-10	1924
stacker	5'-TGAAAAAGTCTGGTAGAACAAAGTTCAGC-3'	971-01-11	1925

118/145

arrestor SET 2	5'-CTCATCAGCTCTGGAGGCG-3'	971-01-09	1926
h2b6p450 designs 2			
probe	5'-CCGTCACGCCTCAGATGACTGCC-NH2-3'	971-01-12	1927
invader	5'-GGAGAAGGTCGGAATCTCTGAATCTCATC-3'	971-01-13	1928
stacker	5'-TCTGTGATGGCATTGCTCGG-3'	971-01-14	1929
arrestor	5'-GGCAGTCATCTGAGGCG-3'	971-01-15	1930
SET 2			
h 2C19 designs 1			
probe	5'-CCGTCACGCCTCCATCCTTAATATCTAT-NH2-3'	971-26-01	1931
invader	5'-GAGAGATTGGTTAAGGATTGCTGAA-3'	971-26-03	1932
stacker	5'-CTGTAGGATATTTCCAATCACTGGG-3'	971-26-04	1933
arrestor	5'-ATAGATATTAAGGATGGAGGCG-3'	971-26-02	1934
SET 2			
probe	5'-AACGAGGCGCACCGTTCAGGC-NH2-3'	971-26-05	1935
invader	5'-CATATCCATGCAGCACCCACCATGA-3'	971-26-07	1936
stacker	5'-CAAAATACAGAGTGAACACAGGGCC-3'	971-26-08	1937
arrestor	5'-GCCTGGAACGGTGCGC-3'	971-26-06	1938
SET 1			
h2C19 shorter site 2 designs			
probe	5'-AACGAGGCGCACCGTTCAGGC-NH2-3'	971-68-01	1939
invader	5'-CATATCCATGCAGCACCCACCATGA-3'	971-26-07	1940
stacker	5'-CCAAAATACAGAGTGAACACAGGGCC-3'	971-68-03	1941
arrestor	5'-CCTGGAACGGTGCGC-3'	971-68-02	1942
SET 1			
probe	5'-AACGAGGCGCACCGTTCAGGC-NH2-3'	971-26-05	1943
probe	5'-AACGAGGCGCACCGTTCAGGC-3'	1051-12-03	1944
probe	5'-AACGAGGCGCACCGTTCAGGC-HEX-3'	1051-12-04	1945
invader	5'-CAAAAATACAGAGTGAACACAGGGCC-3'	971-26-07	1946
stacker	5'-GCCTGGAACGGTGCGC-3'	971-68-04	1947
arrestor		971-26-05	
SET 1			
rat 1A1, rat 1A2 probe	Rat 1A1 site 1 bs. 639-700 5'-CCGTCACGCCTCAGATTGACTATGCTG-NH2-3'	500-58-01	1948

119/145

invader stacker arrestor SET 2	5'-CAGTAACCTCCCCAACTCATTGCTTC-3' 5'-AGCAGCTCTGGTCAICGT-3' 5'-CAGCATAGTCAATCTGAGGCG-3'	500-58-03 500-58-04 500-58-02	1949 1950 1951
rat 1A2 probe invader stacker arrestor SET 1	Rat 1A2 site 1 bs. 674-725 5'-AACGAGGCGCACTGACATTCTCCAC-NH2-3' 5'-GTCCACAGCATTCCCTGAGGA-3' 5'-AAAGTCTTGCTGCTCTTC-3' 5'-GTGGAGAATGTCAGTGCGC-3'	500-58-05 500-58-07 500-58-08 500-53-06	1952 1953 1954 1955
rat 2B1-2B2 patent probe invader stacker arrestor SET 1	5'-AACGAGGCGCACTGGCTTGACACA-NH2-3' 5'-GTCAATGTCTTGGAGCCAAA-3' 5'-GAGAAATTCTGGAGGATGGTGG-3' 5'-TGTTGTCAGCCAGTGCGC-3'	500-49-05 500-49-03 r2B1, 2B2 500-49-07 500-49-06	1956 1957 1958 1959
probe invader stacker arrestor SET 1	5'-AACGAGGCGCACTGGCTTGACACAG-NH2-3' 5'-AGAAAGTTCTGGAGGATGGTGG-3' 5'-CTGTGTCAAGCCAGTGCGC-3'	500-49-01 500-49-03 r2B1, 2B2 500-49-04 500-49-02	1960 1961 1962
rat 2B1-2B2 site 4 probe invader stacker arrestor SET 2	PROBE SET 2 (r2B1 bs 1299-1353, r2B2 bs. 474-528) 5'-AACGAGGCGCACGAGGAACAAATTCATTT-NH2-3' 5'-GTTCTGGAGGATGGTGTGAAGAAC-3' 5'-CGGGCAATGCCCTTCG-3' 5'-AAATGAATTGTTCTCCTCGTGCGC-3'	500-49-12 500-49-10 500-49-14 500-49-13	1963 1964 1965 1966
probe invader stacker arrestor SET 1	5'-AACGAGGCGCACGAGGAACAAATTCATTT-NH2-3' 5'-GGGCAATGCCCTTCG-3' 5'-GAAATGAATTGTTCTCCTCGTGCGC-3'	500-49-08 500-49-10 500-49-11 500-49-09	1967 1968 1969
rat 2B1-2B2 ,5 patent probe	5'-AACGAGGCGCACAGCTGAGAAAGCAG-NH2-3'	500-49-15	1970

120/145

invader	5'-GCCTCAGCCGGATCACCGC-3'	r2B1, 500-49-17	1971
invader	5'-GCCCTCAGCCCGATCACCGC-3'	r2B2, 500-49-18	1972
stacker	5'-ATCTGGTACGTTGGAGGTATT-3'	r2B1 500-49-20	1973
stacker	5'-ATCTGGTATGTTGGAGGTATT-3'	r2B2 500-49-21	1974
arrestor	5'-CTGCTTCTCAGCTCTGCCG-3'	500-49-16	1975
NOTE: all 3 invader/probe sets are designed to detect both 2B1 and 2B2			
SET 1			
rat 2E1 p450 (af061442) 500-73	Rat 2E1 PROBE SET (570C)		
p	5'-CCGTCACGCCCTCGTCGAAACGTTTGTGTT-NH2	500-40-04	1976
l	5'-CCCTCAGACACTTCCTGTGTCATTGTAC-3'	500-40-02	1977
s	5'-GAAGAGGATATCCGCAATGACATTGC-3'	500-40-05	1978
a	5'-AACAAACGTTTCGACGAGGCG-3'	500-40-06	1979
SET 2			
p	5'-CCGTCACGCCCTCGTCGAAACGTTTGTGTTGAAG-NH2-3'	500-40-01	1980
l		500-40-02	
s		500-40-05	
a	5'-CTTCAACAACGTTTCGACGAGGCG-3'	500-40-03	1981
SET 2			
rat 2E1 p450 (af061442) 500-73	Rat 2E1 PROBE SET (822G) (designed over splice junction #5)		
p	5'-CCGTCACGCCCTCCTCCATCTCTATG-NH2-3'	500-40-10	1982
l	5'-GTTCTTGCGCTGTGTTTTCCCTTA-3'	500-40-08	1983
s	5'-AGGAGACAGTCAGTCACATC-3'	500-40-11	1984
a	5'-CATAGAGATGGAGGAGGCG-3'	500-40-12	1985
SET 2			
p	5'-CCGTCACGCCCTCCTCCATCTCTATGAG-NH2-3'	500-40-07	1986
l		500-40-08	
s		500-40-11	
a	5'-CTCATAGAGATGGAGGAGGCG-3'	500-40-09	1987
SET 2			
rat 2E1 PROBE SET (969G)	Designed over splice junction #6		
probe	5'-CCGTCACGCCCTCCTCTTCAATTTCTG-HEX-3'	1073-19-06	1988
invader	5'-CCCTGTCAATTTCTTCATGAAGTTTA-3'	500-40-14	1989
stacker	5'-GGTATTTTCATGAGGATCAGGAGC-3'	500-40-17	1990
arrestor	5'-CCAGAAATTGAAGAGGAGGCG-3'	500-40-15	1991
SET 2			

121/145

probe	5'-CCGTCACGCCTCCTCTTCAATTTCTG-3'	1073-19-05	1992
probe	5'-CCGTCACGCCTCCTCTTCAATTTCTG-NH2-3'	500-40-16	1993
probe	5'-CCGTCACGCCTCCTCTTCAATTTCTGG-NH2	500-40-13	1994
invader		500-40-14	
stacker		500-40-17	
arrestor		500-40-18	1995
SET 2	5'-CAGAAATTGAAGAGGAGGCG-3'		
Rat 2E1 PROBE SET (969G)	Designed over splice junction #6		
probe	5'-CCGTCACGCCTCCTCTTCAATTTCT-NH2-3'	500-73-01	1996
invader	5'-CCCTGTCAATTTCTTCATGAAGTTTA-3'	500-40-14	1997
stacker	5'-GGGTATTTTCATGAGGATCAGGAG-3'	500-73-03	1998
arrestor	5'-AGAAATTGAAGAGGAGGCG-3'	500-73-02	1999
SET 2			
rat 3A's design 2			
probe	5'-CCGTCACGCCTCGTTCCTGGGT-NH2-3'	500-43-15	2000
invader	5'-GAGCAAACTCATGCCAATGCAC-3'	r3A1, 3A18 500-43-23	2001
invader	5'-GAGCAAACTCATGTCAATGCAC-3'	r3A2 500-43-24	2002
invader	5'-GAGCAAACTCATGCCAATACAC-3'	r3A2 500-43-24	2003
stacker	5'-CCATTTCCAAAGGGCAG-3'	short r3A1, 3A2, 3A18 500-43-19	2004
stacker	5'-CCATTTCCAAAGGGCAG-3'	short r3A9 500-43-20	2005
arrestor	5'-ACCCAGGAACGAGGCG-3'	500-43-16	2006
SET 2			
probe	5'-CCGTCACGCCTCGTTCCTGGGT-NH2-3'	500-43-13	2007
invader		r3A1, 3A18 500-43-23	
invader		r3A2 500-43-24	
arrestor		500-43-14	2008
SET 2	5'-GACCCAGGAACGAGGCG-3'		
rat 3A's design 3			
probe	5'-CCGTCACGCCTCTGAGAGCAAACT-NH2-3'	500-43-29	2009
invader	5'-AGAGCGAGTTTCATATTCAA-3'	r3A1, 3A2 500-43-35	2010
invader	5'-AGAGCAACTTTTCATGTTCAA-3'	r3A9 500-43-36	2011
invader	5'-ACAGCAAGTTTCATGCTGAA-3'	r3A18 500-43-37	2012
stacker	5'-CATGCCAATGCAGTTCCTG-3'	r3A1, 3A18 500-43-31	2013
stacker	5'-CATGTCAATGCAGTTCCTG-3'	r3A2 500-43-32	2014
stacker	5'-CATGCCAATACAGTTCCTG-3'	r3A9 500-43-33	2015

arrestor SET 2	5'-AGGTTTGCTCTCCGAGGCG-3'	500-43-30	2016
probe	5'-CCGTCACGCCCTCTGAGAGCAAACCTCA-NH2-3'	500-43-27	2017
invader		r3A1, 3A2	500-43-35
invader		r3A9	500-43-36
invader		r3A18	500-43-37
arrestor SET 2	5'-TGAGGTTTGCTCTCAGAGGCG-3'	500-43-28	2018
rat 3A's designs			
probe	5'-CCGTCACGCCCTCGGAACATCTCCT-NH2-3'	500-43-03	2019
invader	5'-TGCTCTCCATACTGTTCAATGATGGC-3'	r3A1, 3A2	500-43-09
invader	5'-TATCTGTATACTGGTTAATGATGGC-3'	r3A9	500-43-10
invader	5'-TATCTCCATACTGTCTCATGAGGGC-3'	r3A18	500-43-11
s	5'-TGAGTCTTCCACTGGTG-3'	r3A1, 3A2	500-43-05
s	5'-TGAGCTTCCCACTGGTG-3'	r3A9	500-43-06
a	5'-TGAGTTTGCCCACTGGTG-3'	r3A18	500-43-07
SET 2			
probe	5'-CCGTCACGCCCTCGGAACATCTCCTTGA-NH2-3'	500-43-01	2026
invader		r3A1, 3A2	500-43-09
invader		r3A9	500-43-10
invader		r3A18	500-43-11
arrestor SET 2	5'-TCAAGGAGATGTTCCGAGGCG-3'	500-43-02	2027
rat 3A's design 2b			
probe	5'-CCGTCACGCCCTCGTTCTCTGGG-NH2-3'	991-39-01	2028
invader	5'-GAGCAAAACCTCATGCCAATGCAC-3'	r3A1, 3A18	500-43-23
invader	5'-GAGCAAAACCTCATGTCAATGCAC-3'	r3A2	500-43-24
invader	5'-GAGCAAAACCTCATGCCAATACAC-3'	r3A9	500-43-25
stacker	5'-TCCATTTCCAAAGGGCAG-3'	r3A1, 3A2, 3A18	991-39-03
stacker	5'-TCCATTTCCAAAGGGCAG-3'	r3A9	991-39-04
arrestor SET 2	5'-CCCAGGAACGAGGCG-3'	991-39-02	2034
rat or human 1A1 shorter site 2			
probe	5'-CCGTCACGCCCTCCTGTCTGTGAT-HEX-3'	1073-19-02	2035
probe	5'-CCGTCACGCCCTCCTGTCTGTGAT-3'	1073-19-01	2036

probe	5'-CCGTCACGCCCTCCTGTCTGTGAT-NH2-3'	991-12-04	2037
invader	5'-TCCTGACAAATGCTCAATGAGGA-3'	r 1A1 500-53-11	2038
invader	5'-TCCTGACAGTGCTCAATCAGGA-3'	h 1A1 500-53-12	2039
stacker	5' -GTCCCGGATGTGGCC-3'	rat/human 1A1 991-12-06	2040
arrestor	5'-ACATCACACAGACAGGAGGCG-3'	500-53-10	2041
SET 2			
probe	5'-CCGTCACGCCCTCCTGTCTGTGATG-NH2-3'	991-12-01	2042
invader		r 1A1 500-53-11	
invader		h 1A1 500-53-12	
stacker	5'-TCCCGGATGTGGCCCT-3'	rat/human 1A1 991-12-03	2043
arrestor	5'-CATCACAGACAGGAGGCG-3'	991-12-02	2044
SET 2			
probe	5'-CCGTCACGCCCTCCTGTCTGTGATGT-NH2-3'	500-53-09	2045
invader		r 1A1 500-53-11	
invader		h 1A1 500-53-12	
stacker	5'-GTCCCGGATGTGGCC-3'	rat/human 1A1 991-12-06	2046
arrestor	5'-ATCACACAGACAGGAGGCG-3'	991-12-05	2047
SET 2			
rat or human 1A1 site 1			
probe	5'-CCGTCACGCCCTCTGGCCCTTC-NH2-3'	500-53-04	2048
invader	5'-CTGTCTGTGATGTCCCGGATGA-3'	500-53-03	2049
stacker	5' -TCAAATGTCTGTAGTGCTC- 3'	rat 1A1 500-53-06	2050
stacker	5' -TCAAAGGTTTTGTAGTGCTC- 3'	human 1A1 500-53-07	2051
arrestor	5'-GAAGGCCACAGAGGCG-3'	500-53-05	2052
SET 2			
probe	5'-CCGTCACGCCCTCTGGCCCTTCTC-NH2-3'	500-53-01	2053
invader		500-53-03	
arrestor	5'-GAGAAAGGCCACAGAGGCG-3'	500-53-02	2054
SET 2			
Rat/Human 1A1 site 2			
probe	5'-CCGTCACGCCCTCCTGTCTGTGATGT-NH2-3'	500-53-09	2055
invader	5'-TCCTGACAAATGCTCAATGAGGA-3'	r 1A1 500-53-11	2056
invader	5'-TCCTGACAGTGCTCAATCAGGA-3'	h 1A1 500-53-12	2057
stacker	5'-CCCGGATGTGGCCCT-3'	rat/human 1A1 500-53-14	2058
arrestor	5'-ACATCACACAGACAGGAGGCG-3'	500-53-10	2059

124/145



SET 2

rat or human 1A2 sites

probe	5'-AACGAGGCGCACGGACTGTTTTCTGC-HEX-3'	1073-19-04	2060
probe	5'-AACGAGGCGCACGGACTGTTTTCTGC-3'	1073-19-03	2061
probe	5'-AACGAGGCGCACGGACTGTTTTCTGC-NH2-3'	500-53-15	2062
invader	5'-CTTGTGAAGTCTTGATAGTGTTCCTC-3'	rat 1A2 500-53-17	2063
invader	5'-CTTGTCAAAGTCCTGATAGTGTCTCCTC-3'	human 1A2 500-53-18	2064
arrestor	5'-GCAGAAACACAGTCCGTGCGC-3'	500-53-16	2065
SET 1			

shorter h2C19 design site 3

probe	5'-AACGAGGCGCACGATGTCCATCG-NH2-3'	971-48-01	2066
invader	5'-GCAATCAATAAAGTCCCAGGGTTGTTC-3'	971-26-11	2067
stacker	5'-ATTCTGGTGTCTTTTACTTTCTC-3'	971-48-03	2068
arrestor	5'-CGATGGACATCGTGCGC-3'	971-48-02	2069
SET 1			

125/145

## Human IL-10

Oligo Type	Sequence	Oligo Number	Secondary Cassette	Comments	SEQ ID NO
probe	aacgaggcgacacaaactcactcatggct-NH2	511-31-01	FV-1 & FV-2	3' amine	2070
arrestor	agccatgagtgagttggtgcg	511-31-02		All 2'-Ome + 3' amine arrestor for 511-31-01	2071
probe	aacgaggcgacacaaactcactcatggc-NH2	511-30-01	FV-1 & FV-2	3' amine	2072
arrestor	gccatgagtgagttggtgcg	511-30-02		All 2'-Ome + 3' amine arrestor for 511-30-01	2073
arrestor	gccatgagtgagttggtgcg	380-89-02		All 2-Ome Same as 380-82-02	2074
arrestor	gccatgagtgagttggtgcg	380-89-04		All 2-Ome Same as 380-82-04	2075
arrestor	gccatgagtgagttggtgcg	380-89-06		All 2-Ome Same as 380-82-06	2076
arrestor	gccatgagtgagttggtgcg	380-89-08		All 2-Ome Same as 380-82-08	2077
probe	aacgaggcgacacaaactcactcatgg-NH2	511-67-01	FV-1 & FV-2	3' amine	2078
stacker	ctttgtacatgcctctctctggagc	781-79-01		stacker for 511-67-01 All 2'Ome	2079
arrestor	ccatgagtgagttggtgcg	781-79-02		all 2'Ome arrestor for 511-67-01	2080
probe	aacgaggcgacacaaactcactcatg-NH2	781-80-01	FV-1 & FV-2	3' amine	2081
stacker	gcttgcacatgcctctctctggag	781-80-02		stacker for 781-80-01 All 2'Ome	2082
arrestor	catgagtgagttggtgcg	781-80-03	FV-1 & FV-2	all 2'Ome arrestor for 781-80-01	2083
probe	aacgaggcgacacaaactcactcat-NH2	781-81-01		3' amine	2084
stacker	ggcttgcacatgcctctctctgga	781-81-02		stacker for 781-81-01 All 2'Ome	2085
stacker	ggcttgcacatgcctctctctgga	938-74-01		stacker for 781-81-01 All 2'Ome to replace 781-81-02	2086
arrestor	atgagtgagttggtgcg	781-81-03		all 2'Ome arrestor for 781-81-01	2087
probe	ccgacgcgcacacaaactcactcat-NH2	938-46-02	MO4-1/MO4-2/MO4-3	same as 938-46-01 w/ 3' amine	2088
arrestor	atgagtgagttggtgcg	938-46-03		all 2'Ome arrestor for 938-46-01&02	2089
invader	taggctctatgtatgtatgaagatga	380-59-02		longer invader 380-59-02	2090
invader	gtcatgtaggctctatgtatgtatgaagatga	511-32-01			2091

## Mouse IL-4

Oligo Type	Sequence	Oligo Number	Secondary Cassette	Comments	SEQ ID NO
probe	aacgaggcgacactctctctgtgaacctg	511-14-01	FV-1 & FV-2		2092
arrestor	cgaggtcacagagagtgctgcg	511-14-02		All 2'-Ome + 3' amine arrestor for 511-14-01	2093
probe	aacgaggcgacactctctctgtgaacct-NH2	511-12-01	FV-1 & FV-2	458-34-01 with 3' amine	2094
arrestor	aggcacagagagtgctgcg	511-02-01	MO2	All 2'-Ome + 3' amine arrestor for 458-34-01	2095
probe	cagtcacgtctctctctgtgaacct-NH2	511-16-01		3' amine	2096
arrestor	aggcacagagagagagagc	511-16-02		All 2'-Ome + 3' amine arrestor for 511-16-01	2097
arrestor	aggcacagagagagagagc	511-50-01	MISC-1	All 2'-Ome + 3' amine arrestor for 511-16-01	2098
probe	aacgagtcgtacgtctctctgtgaacct	458-35-01			2099
arrestor	aggcacagagagagagc	511-03-01	MISC-1	All 2'-Ome + 3' amine arrestor for 458-35-01	2100
probe	ccagtcgtacgtctctctgtgaacct	458-35-02			2101
arrestor	aggcacagagagagagc	511-04-01	MISC-2	All 2'-Ome + 3' amine arrestor for 458-36-01	2102
probe	aacccacgcactctctctgtgaacct	458-36-01	FV-1 & FV-2		2103
probe	aacgaggcgacactctctctgtgaacct	511-13-01			2104
arrestor	gggtcacagagagagtgctgcg	511-13-02	FV-1 & FV-2		2105
probe	aacgaggcgacactctctctgtga-NH2	781-71-01		3' amine	2106
stacker	cctcggttcaaaatgcgatgatcttc	781-71-02		All 2'-Ome for 781-71-01	2107
arrestor	tcacagagagagtgctgcg	781-71-03		All 2'-Ome arrestor for 781-71-01	2108
Invader	atccatctctgtgcagtgagcgtcccta	380-32-01		Same as 380-32-01 but underlined base is mismatch to sequence	2109
Invader	atccatctctgtgcagtgagcgtcccta	380-32-02			2110
probe	aacgaggcgacacactctctctgtgaacct-NH2	511-44-01	FV-1 & FV-2	3' amine	2111
arrestor	gtcacagagagaggggtgcg	511-44-02		All 2'-Ome + 3' amine arrestor for 511-44-01	2112
probe	aacgaggcgacacactctctctgt-NH2	511-68-01	FV-1 & FV-2	3' amine	2113
arrestor	acagagagaggggtgcg	511-68-02		All 2'-Ome + 3' amine arrestor for 511-68-01	2114
invader	ggcacatccatctctctgtgcagtgctga	511-45-01	MO4-1/MO4-2/MO4-3		2115
probe	ccgtaacgcctctctctgtgaacctgt-NH2	511-46-01		3' amine	2116

arrestor	acgaggtcacaggagaggc	511-46-02	MO4-1/MO4-2/MO4-3	All 2'-Ome + 3' amine arrestor for 511-46-01	2117
<b>probe</b>	ccgtcacgctctctctgtgacctc-NH2	511-69-01		3' amine	2118
arrestor	gaggtcacaggagaggc	511-69-02		All 2'-Ome + 3' amine arrestor for 511-69-01	2119
<b>probe</b>	ccgtcacgctctctctgtgacctc-NH2	781-68-01	MO4-1/MO4-2/MO4-3	3' amine	2120
stacker	tcggttcaaaatgcgaigtatctctca	781-68-02		All 2'Ome stacker for 781-68-01	2121
arrestor	gggtcacaggagaggcg	781-68-03		All 2'-Ome arrestor for 781-68-01	2122
<b>probe</b>	ccgtcacgctctctctgtgacctc-NH2	781-69-01	MO4-1/MO4-2/MO4-3	3' amine	2123
stacker	ctcggttcaaaalgcgaigtatctctca	781-69-02		All 2'Ome stacker for 781-69-01	2124
arrestor	gtcacaggagaggcg	781-69-03		All 2'-Ome arrestor for 781-69-01	2125
invader	acatccatctccgtgcatggcgctcccta	511-47-01			2126
probe	cagtcacgtctctctctctct-NH2	511-17-01	MO2	3' amine	2127
arrestor	aggagaaggagagagagc	511-17-02		All 2'-Ome + 3' amine arrestor for 511-17-01	2128
invader	gcacatcatctctccgtgcatggcga	511-18-01			2129
probe	ccgcgcgagatcactctgtgaacc-NH2	781-83-01	TT-1/TT-2	3' amine	2130
arrestor	gggtcacaggagatgc	781-83-02		All 2' Ome arrestor for 781-83-01	2131
probe	ccgtcacgctctctctgtgaacc-NH2	781-82-01	MO4-1/MO4-2/MO4-3	3' amine	2132
invader	ccgtgcatggcgctccctca	781-82-02			2133
arrestor	gggtcacaggagaggcg	781-82-03		All 2' Ome arrestor for 781-82-01	2134
probe	ccgtcacgctctctctgtgaacc-NH2	781-84-01	MO4-1/MO4-2/MO4-3	3' amine	2135
invader	cgltgcatggcgctccctca	781-84-02			2136
arrestor	gggtcacaggagaggcg	781-84-03		All 2' Ome arrestor for 781-84-01	2137

## Mouse IL-2

Oligo Type	Sequence
probe	cagtcacgtctctctgttacaacagttactct-NH2
arrestor	agagtaactgtgtlaaaactaaagagacg
invader	gcactcaaatgtgtgtcagagccca

## Mouse IFN- $\gamma$

Oligo Type	Sequence
probe	cagtcacgtctctctctgttccagttcc-NH2
arrestor	ggaaactggcaaaaggagagagc
probe	cagtcacgtctctctctgttccagttc-NH2
arrestor	gaactggcaaaaggagagagc
probe	cagtcacgtctctctctgttccagtt-NH2
arrestor	aactggcaaaaggagagagc
invader	gctctgcaggatttcaigtaccaca

## Human TNF- $\alpha$

Oligo Type	Sequence
probe	ccgcgcgagatcactctgtacigtg-NH2
arrestor	caggcagtcagatgactcgg
probe	ccgcgcgagatcactctgtacigtg-NH2
arrestor	aggcagtcagatgactcgg
invader	ctt gtc act cgg ggt tgg aga aga tga a

## Human IL-1 $\beta$

Oligo Type	Sequence
probe	gccgtcacgctctctctgtttagggcc-NH2

Comments
3' amine
All 2'-Ome + 3' amine arrestor for 511-19-01

Comments
3' amine
All 2'-Ome + 3' amine arrestor for 511-24-01
3' amine
All 2'-Ome + 3' amine arrestor for 511-23-01
3' amine
All 2'-Ome + 3' amine arrestor for 511-20-01

Comments
3' amine (based on 685-27-01-1 base shorter)
All 2'-Ome + 3' amine arrestor for 511-77-01
3' amine (based on 685-27-01-2 bases shorter)
All 2'-Ome + 3' amine arrestor for 511-78-01

Comments
3' amine (based on 685-21-01)

arrestor	ggccctaaacagatgagagggt	511-80-01	All 2'-Ome + 3' amine arrestor for 511-79-01	2154
arrestor	ggccctaaacagatgagagggtga	511-80-02	All 2'-Ome + 3' amine arrestor for 511-79-01	2155
invader	caggctccggagaggacacta	685-23-01		2156

## Human IL-6

Oligo Type	Sequence	Oligo Number	Secondary Cassette	Comments	
probe	gcggtcacgcctctctctcattgaatct-NH2	511-81-01	MO4-1/MO4-2/MO4-3	3' amine (based on 685-16-01)	2157
arrestor	aggattcaatgagagagagcggtga	511-82-01		All 2'-Ome + 3' amine arrestor for 511-81-01	2158
arrestor	aggattcaatgagagagagcggt	511-82-02		All 2'-Ome + 3' amine arrestor for 511-81-01	2159
probe	cggtcacgcctctctctcattgaatct-NH2	781-27-01	MO4-1/MO4-2/MO4-3	3' amine (511-81-01 with new arm)	2160
arrestor	aggattcaatgagagagagcggt	781-27-02		All 2'-Ome + 3' amine arrestor for 781-27-01	2161
probe	gcccgtcacgcctctctctcattgaatcc-NH2	511-83-01	MO4-1/MO4-2/MO4-3	3' amine (based on 685-16-01)	2162
arrestor	ggattcaatgagagagagcggtga	511-84-01		All 2'-Ome + 3' amine arrestor for 511-81-01	2163
arrestor	ggattcaatgagagagagcggt	511-84-02		All 2'-Ome + 3' amine arrestor for 511-81-01	2164
probe	cggtcacgcctctctctcattgaatcc-NH2	781-28-01	MO4-1/MO4-2/MO4-3	3' amine (511-83-01 with new arm)	2165
arrestor	ggattcaatgagagagagcggt	781-28-02		All 2'-Ome + 3' amine arrestor for 781-28-01	2166
probe	cggtcacgcctctctctcattgaatcc-NH2	781-29-01	MO4-1/MO4-2/MO4-3	3' amine (1 base shorter than 781-28-01)	2167
arrestor	gattcaatgagagagagcggt	781-29-02		All 2'-Ome + 3' amine arrestor for 781-29-01	2168
probe	cggcgagatcactctcattgaatcc-NH2	781-30-01	TT-1/TT-2	3' amine (781-29-01 with new arm)	2169
arrestor	gattcaatgagagagagcggtc	781-30-02		3' amine (781-29-01 with new arm)	2170
invader	cca aaa gtc cag tga ttt tca cca ggc aag a	685-18-01		All 2'-Ome + 3' amine arrestor for 781-30-01	2171

## Secondary Cassettes

SRT	cggaggaagcagttggtgcgcctcgttaaNH2	277-68-05	FV-1		2172
FRET probe	Fcaac(Cy3)gctctctcgc	187-46-01			2173
SRT	ccaggaagcaagtggtgcgcctcgttt	996-29-01	FV-2		2174
FRET probe	Fcac(Z21)tgctctcgtg	767-29-02			2175
SRT	cggaaagaagcagttgagagcggtgaacNH2	641-60-03	MO4-1		2176
FRET probe	Fcaac(Cy3)gctctctcgc	187-46-01			2177
SRT	cggaaagaagcagttgagagcggtgaacNH2	562-93-01	MO4-2		2178
FRET probe	Fcaac(Cy3)gctctctcgc	187-46-01			2179
SRT	ccaggaagcaagtgagagcggtgaacggu	996-29-02	MO4-3		2180
FRET probe	Fcac(Z21)tgctctcgtg	767-29-02			2181
SRT	cggaggaagcagttggtgattcgcgcgNH2	562-92-01	TT-1		2182
FRET probe	Fcaac(Cy3)gctctctcgc	187-46-01			2183
SRT	cggaaagaagcagttggtgattcgcgcgNH2	685-56-01	TT-2		2184
FRET probe	Fcaac(Cy3)gctctctcgc	187-46-01			2185
SRT	gctactgagatgaagagagagcggtgaNH2	491-68-02	MO2		2186
FRET probe	Fcttc(Cy3)tcctcagtagc	491-68-01			2187
SRT	cgg agg aag cgg ttg cgt acg act ggt taa-NH2	458-35-03	MISC-1		2188
FRET probe	Fcaac(Cy3)gctctctcgc	187-46-01			2189
SRT	cgg agg aag cgg ttg gtt cgg gtt gtt gg-PO3	441-31-02	MISC-2		2190
FRET probe	Fcaac(Cy3)gctctctcgc	187-46-01			2191

Oligo sequence descriptions: 5' to 3' direction, 2'-Ome nts are bolded and underlined, internal modifications defined in ( )

FRET Oligo/SRT Combinations

Set	FRET Oligo	SRT
Set 1	187-46-01	641-60-02
Set 2	187-46-01	690-82-03
Set 3	307-70-02	339-50-03
Set 4	303-18-05	343-63-07
Set 5	303-18-05	343-25-01
Set 6	187-46-01	649-10-01
Set 7	744-80-03	277-068-05N
Set 8	187-46-01	833-18-07
Set 9	767-28-03	777-71-10
Set 10	767-29-02	996-29-01
Set 11	1067-20-01	996-29-01
Set 12	307-70-02	307-70-04
Set 13	491-01-01	491-02-04
Set 14	187-46-01	562-84-01

FRET Oligos

Oligo #	Oligo Sequence
187-46-01	Fam-CAAC(CY3)GCTTCCTCCG
307-70-02	Fam-ATTTC(CY3)TCTCAGAC-NH2
303-18-05	Fam-TAAC(CY3)GCTTCCTCCG
744-80-03	Fam-CAA(Dabcy)TGCTTCCTCCG
767-28-03	Red Dye-CTC(Z-2)TTCACAGTGG
767-29-02	Fam-CAC(Z-2)TGCTTCGTGG
1067-20-01	Fam-CAC(Z-2)TGCTTCGTGG
491-01-01	Fam-CTTC(CY3)TCTCAGAC

SEQ ID NO
2192
2193
2194
2195
2196
2197
2198
2199

SRT

Oligo #	Oligo Sequence
641-60-02	CGGAGGAAGCAGTTGGAGGCGTGACGGT-NH2
690-82-03	CGGAGGAAGCAGTTGGCGGTGACGGTT
339-50-03	CAGTCTGAGATGAATGAGACGAGAGAGT-NH2
343-63-07	CGGAGGAAGCGGTTAGTCTGCCACGTCAT-NH2
343-25-01	CGGAGGAAGCGGTTAGTCTGCCACGTCAT-NH2
649-10-01	CGGAGGAAGCAGTTGGTGGCGCTCGTAA-NH2
277-068-05N	CGGAGGAAGCAGTTGGTGGCGCTCGTAA-NH2
833-18-07	CGGAGGAAGCAGTTGGCGGCGTGCGGCT-NH2
777-71-10	GCAGTGAATGAATGAGGCGGTGACGGT-NH2
996-29-01	CCAGGAAGCAAGTGGTGGCGCTCGUUU
307-70-04	CAGTCTGAGATGAATGATACGCGAGG-NH2
491-02-04	AGTCTGAGATGAAGGAGACGTGACTGG-NH2
562-84-01	CGGAGGAAGCGGTTGGTGATCTCGGCG-NH2

SEQ ID NO
2200
2201
2202
2203
2204
2205
2206
2207
2208
2209
2210
2211
2212

Oligo Type	Oligo #	Oligo Sequence	Notes	Position	SEQ ID NO
Human IL-2					
Probe	196-56-01	TCTGTGGCGTATCCTTCTTGGCATGTAA		Splice Junction 2	2213
Probe	196-56-02	GTGGCGTATCCTTCTTGGCATGTAA			2214
Probe	196-56-03	CGGTATCCTTCTTGGCATGTAA			2215
Invader	128-93-02	GAAGATGTTTCAGTTCTGTGG(ddC)	ddC = dideoxy C		2216
Capture Oligo	145-030-05	AAAGATACCCACAGAACACG(BIOTIN-da)TT			2217
Probe	315-28-01	TGGCGTATCTTAATCCATTCAAAAT		Splice Junction 1	2218
Invader	315-28-02	TGGGAGTTTGGGATCTTTGTAATTAA			2219

Capture Oligo	195-023-01	AAAAGATACGCCACAGC(BIOTIN-dT)C	2220
Probe	315-29-01	TGGCGTATCTAATTATTCCATTTC	2221
Invader	315-29-02	ATCTGGTGAGTTGGATTCTTGA	2222
Capture Oligo	195-023-01	AAAAGATACGCCACAGC(BIOTIN-dT)C	2223
Probe	315-29-03	TGGCGTATCTTCCATTCAAATCATC	2224
Invader	315-29-04	GTTGGGATTCTTGTAATTATAAA	2225
Capture Oligo	195-023-01	AAAAGATACGCCACAGC(BIOTIN-dT)C	2226
Probe	315-30-01	GTGGCGTATCTTCTTGGGCAT	2227
Invader	315-30-02	GAAGATGTTTCAGTTCTGTGGC	2228
Capture Oligo	195-023-01	AAAAGATACGCCACAGC(BIOTIN-dT)C	2229
Human b-actin			
Probe	315-26-01	TGGCGTATCTTGGGTCACTCTTC	2230
Invader	315-26-02	GGGTGTTGAAGGTCCTCAACATGAA	2231
Capture Oligo	195-023-01	AAAAGATACGCCACAGC(BIOTIN-dT)C	2232
Probe	315-27-01	TGGCGTATCTCTTGATCTTCATTGT	2233
Invader	315-27-02	ACTTGCCTCAGGAGGAGCAATGAA	2234
Capture Oligo	195-023-01	AAAAGATACGCCACAGC(BIOTIN-dT)C	2235
Probe	315-91-01	TGGCGTATCTGATCTGGTCACTCT	2236
Invader	315-91-02	TGGCTGGGTGTTGAAGGTCCTCAACAA	2237
Capture Oligo	195-023-01	AAAAGATACGCCACAGC(BIOTIN-dT)C	2238
Probe	315-92-01	ACCCGTATCTGCCCAGGAAGGA	2239
Invader	315-92-02	AGTTTCGTGGATGCCACAGGAGACCAA	2240
Invader	315-92-03	AGTTTCGTGGATGCTACAGGAGACCAA	2241
Capture Oligo	195-023-01	AAAAGATACGCCACAGC(BIOTIN-dT)C	2242
Probe	340-32-01	TGGCGTATCTCTCAAAACATGATCT	2243
Invader	340-32-02	ACGTACATGGCTGGGGTGTGAAGGA	2244
Capture Oligo	195-023-01	AAAAGATACGCCACAGC(BIOTIN-dT)C	2245
Probe	340-33-01	TGGCGTATCTGATCTGGTCACTC	2246
Invader	340-33-02	TGGCTGGGTGTTGAAGGTCCTCAACAA	2247
Capture Oligo	195-023-01	AAAAGATACGCCACAGC(BIOTIN-dT)C	2248
Probe	740-01-01	CCGTCACGCTCGCCTTGGGGTTC	2249
Invader	740-01-02	TCTGGGTCACTCTCTCGCGGTGA	2250
Arrestor	740-01-03	<b>GAAGCCCCAAGGGAGGGCGI</b>	2251
Secondary Cassette		Set 1	
Probe	740-01-08	CCGTACCCGCCATGGGTCACTCTCT	2252
Stacker	740-01-04	CGCGGTTGGCCTTGGGGTT	2253
Invader	740-01-06	CTGGGGGTGTTGAAGGTCTCAACATGATCC	2254
Arrestor	740-01-09	<b>AGAAAGATGACCCATGSCGG</b>	2255
Secondary Cassette		Set 2	
Mouse GAPDH			
Probe	425-59-01	FI-CTCTCTCGTCTCTCTCTGGAAGA	2256
Invader	425-59-02	ATTTGATGTTAGTGGGGTCTCGCA	2257
Probe	425-60-01	FI-CTCTCTCGTCTCTCTGTCACAATC	2258
Invader	425-60-02	GCAGTTGGTGGTGCAGGATGCATA	2259
Probe	425-61-01	FI-CTCTCTCGTCTCTACCAAGAAATG	2260
Invader	425-61-02	GCTGTAGCCCGTATTCAATTGTCAA	2261
Probe	425-80-01	FI-CTCTCTCGTCTCTCTCTCTGGAAG	2262
Invader	425-80-02	CATTGTAGTGTAGTGGGGTCTCGA	2263
Probe	425-87-01	CTCTCTCGTCTCTCTCTCTGGAAGA	2264
Invader	425-59-02	ATTTGATGTTAGTGGGGTCTCGCA	2265
Arrestor	425-87-04	<b>ICTTCAGGAGAGAGCG</b>	2266
Secondary Cassette		Set 3	
Probe	425-87-02	CTCTCTCGTCTCTCTCTCTGGAAG	2267
Invader	425-80-02	CATTGTAGTGTAGTGGGGTCTCGA	2268
		FI = Fluorescien	
		FI = Fluorescien	
		FI = Fluorescien	
		Same as 425-59-01 without Fluorescien	
		Same as 425-80-01 without Fluorescien	

130/145

Arrestor	425-87-05	<b>CTTCCAGGAGGAGACG</b>	2269
Secondary Cassette		Set 3	
Probe	425-87-03	CTCTCTCGTCTCTACCGAAATG	2270
Invader	425-61-02	GCTGTAGCCGTATTTCATTGTCAA	2271
Arrestor	425-87-06	<b>CATTTCCTGGTAGAGACG</b>	2272
Secondary Cassette		Set 3	
Probe	453-23-01	ATGACGTGACAGACCTCTGGAAGAT	2273
Probe	453-23-03	ATGACGTGACAGACCTCTGGAAGATG	2274
Invader	425-80-02	CATTTCATGTTAGTGGGCTCTCGA	2275
Arrestor	453-23-04	<b>CACTTCACAGGAGGCTCTGT-NH2</b>	2276
Secondary Cassette		Set 4	
Probe	453-23-02	ATGACGTGGCAGACCTCTGGAAGAT	2277
Invader	425-80-02	CATTTCATGTTAGTGGGCTCTCGA	2278
Arrestor	453-23-05	<b>ATCTTCAGGAGGCTCTGT-NH2</b>	2279
Secondary Cassette		Set 5	
Probe	435-67-04	CAGTCACGTCTCTTCAGGTTTTG	2280
Invader	395-05-07	AGGCAGCTCTCAGGTCAGGTGTGA	2281
FRET Probe - Secondary Reaction	524-51-01	FI-CTTC(Cy3)TCTCAGTAGCG	2282
Secondary Reaction Template	524-51-03	CGCTACTGAGATGAAGGAGACGCTGACTGTGA-NH2	2283
Secondary Reaction Template	524-51-04	CGCTAAATGAGATGAAGGAGACGCTGACTGTGA-NH2	2284
Probe	435-67-04	CAGTCACGTCTCTTCAGGTTTTG	2285
Invader	395-05-07	AGGCAGCTCTCAGGTCAGGTGTGA	2286
FRET Probe - Secondary Reaction	524-51-02	FI-CTTC(Cy3)TCTCAGTAGCGA	2287
Secondary Reaction Template	524-51-05	TCGCTACTGAGATGAAGGAGACGCTGACTGTGA-NH2	2288
Secondary Reaction Template	524-51-06	TCGCTAAATGAGATGAAGGAGACGCTGACTGTGA-NH2	2289
Human Ubiquitin			119
Probe	796-72-01	AACGAGGGCGCACCTTTACATTTTCTATCGTATCC	2290
Invader	428-81-02	CTTCTCTTATCCTGGATCTTGGCA	2291
Arrestor	796-72-02	<b>GGATACGATAGAAAATGTAAAGGTGCGC</b>	2292
Secondary Cassette		Set 6	
Probe	796-72-03	AACGAGGGCGCACCTTTACATTTTCTATCGTATC	2293
Invader	428-81-02	CTTCTCTTATCCTGGATCTTGGCA	2294
Arrestor	796-72-04	<b>GATACGATAGAAAATGTAAAGGTGCGC</b>	2295
Secondary Cassette		Set 6	
Probe	820-35-01	AACGAGGGCGCACCTTTACATTTTCTATCG	2296
Probe	820-35-02	AACGAGGGCGCACCTTTACATTTTCTATCGT	2297
Invader	428-81-02	CTTCTCTTATCCTGGATCTTGGCA	2298
Arrestor	820-35-03	<b>ACGATAGAAAATGTAAAGGTGCGC</b>	2299
Secondary Cassette		Set 7	
Probe	820-88-01	AACGAGGGCGCACCTTTACATTTTCTATCGT-NH2	2300
Probe	820-88-02	AACGAGGGCGCACCTTTACATTTTCTATCGT	2301
Probe	820-88-03	AACGAGGGCGCACCTTTACATTTTCTATCGT	2302
Probe	820-88-04	AACGAGGGCGCACCTTTACATTTTCTATCGTT	2303
Invader	428-81-02	CTTCTCTTATCCTGGATCTTGGCA	2304
Arrestor	820-35-03	<b>ACGATAGAAAATGTAAAGGTGCGC</b>	2305
Secondary Cassette		Set 7	
Probe	847-65-01	GCCGCACGCCGCTTACATTTTCTATCGT	2306
Invader	428-81-02	CTTCTCTTATCCTGGATCTTGGCA	2307
Arrestor	847-65-02	<b>ACGATAGAAAATGTAAAGGTGCGC</b>	2308
Arrestor	847-65-03	<b>ACGATAGAAAATGTAAAGGTGCGC</b>	2309
Secondary Cassette		Set 8	
Probe	936-61-01	AACGAGGGCGCACCTTTACATTTTCTATCGTATCCG	2310
Invader	428-81-02	CTTCTCTTATCCTGGATCTTGGCA	2311

Same as 425-61-01 without Fluorescein

Splice Junction 4

Splice Junction 4

119

Same as 820-35-02 with 3' Amine  
Same as 820-35-02 with O-Me U for Blocking  
Same as 820-35-02 with O-Me G for Blocking  
Same as 820-35-02 with T for Blocking. The T is a mismatch against the RNA sequence.

Same as 428-87-01 without Biotin blocking group

Arrestor Secondary Cassette	936-61-02	CGGATACGATAGAAAATGTAAGGTGCGC Set 7	Same as 428-87-03 without Biotin blocking group	2312
Monocyte Chemotactic Protein 1 (MCP-1)				
Probe	820-89-01	CCGTACGCTCCTTCGGAGTTTGGG	Same as 720-92-01 without the amine	2313
Invader	685-76-01	GGTTGTGGAGTGAGTTCAAGTA		2314
Arrestor	820-89-02	CCCAAACTCCGAAGGAGGCG Set 9		2315
Secondary Cassette				
MAGE-3				
Probe	1001-01-01	FI-TTTTCTGGAAGCTTTGCT	Same analyte specific Region as 871-18-02.	2316
Invader	871-18-03	CGATGCCAAAGACCAGCTGCAAGGAAG		2317
Stacker	871-18-01	GAAGATCACAGGAAGAAATAC		2318
Stacker	1138-50-01	GCAGCTCTTGGGA		2319
Probe	1138-50-02	AACGAGGCGCACGTTGGTGA		2320
Stacker	1138-50-03	GCAGCTCTTGGGACI		2321
Probe	1138-50-04	AACGAGGCGCACGTTGGTGAG		2322
Invader	1138-50-05	CTCAGGAGTAGTTTCTCTGCACGAAATC		2323
Arrestor	1138-50-06	CTCACCCCAACGTGCGC Set 10		2324
Secondary Cassette				
Stacker	1138-51-01	AGCTCTTGGGAIC		2325
Probe	1138-51-02	AACGAGGCGCACCTTGGTGAGC		2326
Stacker	1138-51-03	GCCTCTTGGGAIC		2327
Probe	1138-51-04	AACGAGGCGCACCTTGGTGAGCA		2328
Invader	1138-51-05	CAGGTAGTTTCTCTGCACGAAATGA		2329
Arrestor	1138-51-06	TGCTCACCCCAAGTGGCG Set 11		2330
Secondary Cassette				
Stacker	1138-67-01	TGCAGGATCACTGCG		2331
Probe	1138-67-02	AACGAGGCGCACACCAATTCATAACA		2332
Invader	1138-67-03	GGCCCTTGGACCCCA		2333
Arrestor	1138-67-04	TGTAAGAAITGGTGGTGGCG Set 11		2334
Secondary Cassette				
Stacker	1138-67-05	CATGAGGATCACTGCG		2335
Probe	1138-67-06	AACGAGGCGCACACCAATTCATAACA		2336
Invader	1138-67-07	AGGCCCTTGGACCCCA		2337
Arrestor	1138-67-08	TTATGAATGGTGGTGGCG Set 11		2338
Secondary Cassette				
Human Oncostatin M				
Probe	339-30-02	CTGGCGTATCTAGGGCTCCA		2339
Invader	264-42-03	GTGTTCAGGTTTTGGAGCGGATAA		2340
Arrestor	374-32-01	CTGGAGCCCTAGATAC-NH2		2341
Arrestor	374-32-02	CTGGAGCCCTAGATAC-NH2		2342
Arrestor	374-32-03	CTGGAGCCCTAGATAC-NH2		2343
Secondary Cassette				
Probe	524-39-01	CAGTCACGTCTCTCAGGTTTG-NH2	Same as 435-67-04 with 3' Amine	2344
Invader	395-05-07	AGGCAGCTCTCAGGTCAGGTGTA		2345
Stacker	435-40-02	GAGCGGATATAGGGCTCCA		2346
Arrestor	369-47-07	CAAAACCTGAAGAGACG-NH2 Set 13		2347
Secondary Cassette				
Probe	1088-74-01	AACGAGGCGCACCTCTGTGTG		2348
Arrestor	1088-74-02	CACACAGAGGGTGGCG		2349
Probe	1088-74-03	AACGAGGCGCACCTCTGTGTG-NH2		2350
Probe	1088-74-04	AACGAGGCGCACCTCTGTGTG-HEX	HEX = Hexanediol	2351
Invader	603-75-03	GCAAGGACCAAGACTGAGCAGCGTA		2352



Stacker	752-01-05	<b>AGCAGTAGCCCCCATG</b>	2353
Arrestor	641-62-04	<b>CACACAGAGGGAGGCG-NH2</b>	2354
Secondary Cassette		Set 10	
Probe	1138-49-02	AACGAGGCGCACCTTCTGGAG-NH2	2355
Stacker	1138-49-01	<b>CTGGCCAAAGGAG</b>	2356
Invader	1138-49-03	GTCCTGCATGAGATCTGTCTGA	2357
Arrestor	1138-49-04	<b>CTCCAGAAAGGTGGC</b>	2358
Secondary Cassette		Set 11	
Probe	1138-49-06	AACGAGGCGCACTCTGCTTCT-NH2	2359
Stacker	1138-49-05	<b>GGAGCTGGCCAA</b>	2360
Invader	1138-49-07	TGGTGTCTGCTGCATGAGATCTGA	2361
Arrestor	1138-49-08	<b>ICCAGAAAGCAGAGTGGC</b>	2362
Secondary Cassette		Set 11	
Probe	1138-49-10	AACGAGGCGCACCATGAGATCT-NH2	2363
Stacker	1138-49-09	<b>GTCGTCTTCTGGA</b>	2364
Invader	1138-49-11	GAGTCTGCTGGTGTCCCTGA	2365
Arrestor	1138-49-12	<b>AGAICTCAITGGTGGC</b>	2366
Secondary Cassette		Set 11	
Probe	1163-01-01	<b>TGGCCAAAGGAGCA</b>	2367
Stacker	1163-01-02	AACGAGGCGCACTTCTGGAGC-NH2	2368
Invader	1163-01-03	TCCTGCATGAGATCTGTCTGCA	2369
Arrestor	1163-01-04	<b>GCTCCAGAAAGTGGC</b>	2370
Secondary Cassette		Set 11	
Probe	1163-01-05	<b>GGCCAAGGAGGCAC</b>	2371
Stacker	1163-01-06	AACGAGGCGCACTCTGGAGCT-NH2	2372
Invader	1163-01-07	CCTGCATGAGATCTGTCTGCTA	2373
Arrestor	1163-01-08	<b>AGCTCCAGAGTGGC</b>	2374
Secondary Cassette		Set 11	
Probe	1163-01-09	<b>GCCAAGGAGGACG</b>	2375
Stacker	1163-01-10	AACGAGGCGCACCTGGAGCTC-NH2	2376
Invader	1163-01-11	CCTGCATGAGATCTGTCTGCTTA	2377
Arrestor	1163-01-12	<b>GAGCTCCAGGTTGGC</b>	2378
Secondary Cassette		Set 11	
84h6r			
Probe	688-51-01	CGCCGAGATCAGCCCAACGACGGTCT	2379
Invader	688-51-02	AGCCCTTGAGTTTAATAACTTCATAGGCACCTA	2380
Arrestor	688-51-03	<b>AGACCCGTCGTGGCGTGATC</b>	2381
Secondary Cassette		Set 14	
Probe	688-51-04	CGCCGAGATCACCTCAACACCATAAAGCCCA	2382
Invader	688-51-05	CGGAGAGACTGAGGAATACGTACCCACCA	2383
Arrestor	688-51-06	<b>TGGCTTTAIGGTGTGAGGTGATC</b>	2384
Secondary Cassette		Set 14	
MSH2			
Probe	690-32-02	CCGTACGCGCTCCGAACCTGCCCTAG	2385
Invader	690-32-04	<b>GTATATATAGTCCCGACGATCAAGAGGC</b>	2386
Stacker	709-52-01	GATCCCTGGGYAGGG	2387
Arrestor	690-32-05	<b>GCGGAGGCTTGACGGGATC</b>	2388
Secondary Cassette		Set 1	

SEQ ID NO

bold indicates 2' O methyl base

ELISA Format Kits

Leukocyte-associated molecule-1 alpha subunit, human (h-LFA1)

G4731 Probe Set

p

5'-CTCTCTCGTCTCCAGGGCGTCTCGTCGG-PO4-3'

2389

i

5'-CTGTACACACGTCGGTGCTGA-3'

2390

c

5'-AAAAGGAGACGAGAGAGTG-3'

2391

for the remainder of the oligo sets on this list, the fret/target secondary sets are one of the following 11:

FRET/TARGET SETS

FRET TARGET

set 1	307-70-03	502-93-01
set 2	307-70-03	502-93-02
set 3	187-46-01	641-60-02
set 4	187-46-01	277-68-05
set 5	187-46-01	685-56-01
set 6	187-46-01	641-60-03
set 7	187-46-01	649-10-01
set 8	680-17-02	782-70-02
set 9	187-46-01	277-68-06
set 10	187-46-01	491-02-02
set 11	307-70-03	761-40-02

FRETS

307-70-03  
187-46-01  
680-17-02

5'-Fam-ATTC(CY3)TCTCAGACT-NH2-3'  
5'-Fam-CAAC (CY3)GCTTCCTCCG-3'  
5'-Fam-CGCT (CY3)TCTCGCTCGC-3'

2392  
2393  
2394

TARGETS

502-93-01  
502-93-02  
641-60-02  
277-68-05  
685-56-01  
641-60-03  
649-10-01  
782-70-02  
277-68-06  
491-02-02

5'-CAGTCTGAGATGAATGATACGAGAGAGT-NH2-3'  
5'-CAGTCTGAGATGAATGAGACGAGAGAGT-NH2-3'  
5'-CGGAGGAAGCAGTTGGAGGCGTGACGGT-NH2-3'  
5'-CGGAGGAAGCAGTTGGTGGCCTCGTTAA-PO4-3'  
5'-GCGGAAGAAGCGGTTGGTATCTCGGCGG-NH2-3'  
5'-CGGAAGAAGCAGTTGGAGGCGTGACGGT-NH2-3'  
5'-CGGAAGAAGCAGTTGGTGGCCTCGTTAA-NH2-3'  
5'-GCGAGAGAGACGCGCAACCTGCCGTTTC-3'  
5'-CGGAGGAAGCAGTTGTCCGCCGAAGATG-3'  
5'-CGGAAGAAGCAGTTGGAGACGCTGTGG-NH2-3'

2395  
2396  
2397  
2398  
2399  
2400  
2401  
2402  
2403  
2404

134/145

2405

# Cell Lysate Kits

adipocyte lipid binding protein, mouse (m-aP2)

C289 Probe Set

I

p

a

a

a

p

p

a

a

p

a

a

p

p

a

a

G392 Probe Set

p

I

rev-ErbA, mouse (m-revErbA)

C155 Probe Set

p

I

Carnitine palmitoyltransferase, mouse (m-CPT-1)

T352 Probe Set

p

I

C851 Probe Set

p

I

Carnitine palmitoyltransferase, human (h-CPT-1)

135/145

5'-GGAGTGAGACAGCGAAAGACTGCCGTTCT-3'

FRET/TARGET SET 1

5'-CCGCCATCTAGGGTTATGATGCTA-3'

5'-CTCTCTCGTCTCCTTCACCTTCCCTGTCG-NH2-3'

3'-PO4-AGCAGAGGAAAGTGGAAAGGACAGC-5'

3'-NH2-AGCAGAGGAAAGTGGAAAGGACAGC-5'

3'-PO4-AGAGCAGAGAAAGTGGAAAGGACAGC-5'

5'-AACGAGGCGCACCTTCACCTTCCCTGTCG-NH2-3';

5'-AACGAGGCGCACCTTCACCTTCCCTGTCG-Biotin-3'

3'-PO4-CCGCGTGGAAAGTGGAAAGGACAGC-5'

3'-PO4-CTCCGCGTGGAAAGTGGAAAGGACAGC-5'

5'-CATCTTCGCGGACTTCACCTTCCCTGTCG-NH2

3'-PO4-GCCTGAAGTGGAAAGGACAGC-5'

3'-PO4-GCGCCTGAAGTGGAAAGGACAGC-5'

5'-CTTGCTCCCCGTCCTTCACCTTCCCTGTCG-NH2

5'-CTTGCTCCCCGTCCTTCACCTTCCCTGTCG-Biotin

3'-PO4-GGGCACGAAAGTGGAAAGGACAGC-5'

3'-PO4-AGGGGCACGAAAGTGGAAAGGACAGC-5'

FRET/TARGET SET 1

5'-CTCTCTCGTCTCCACATTCACCACCAG-NH2-3'

5'-TTGTGTAAGTCACGCGCTTTCATAAT-3'

FRET/TARGET SET 4

5'-AACGAGGCGCACGAAAGCAGGTAATGAATCT-NH2-3'

5'-CCACTCCTGAAGGCTCCGCGAGTC-3'

FRET/TARGET SET 2

5'-CTCTCTCGTCTCAATGCCTGTCGCC-NH2-3'

5'-GCTTCAGGGTTTGTCTCGGAAGAAGAAC-3'

FRET/TARGET SET 2

5'-CTCTCTCGTCTCGTTTGGCGGATACAT-NH2-3'

5'-CGGCTTGATCTCTTCACGGTCCAC-3'

Variable	Mean	SD	Min	Max
Age	34.5	10.2	21	55
Gender	0.5	0.5	0	1
Marital status	0.6	0.5	0	1
Education	12.5	1.5	9	16
Income	15.2	5.8	5	35
Health status	0.8	0.4	0	1
Stress level	3.2	1.5	1	5
Life satisfaction	4.5	1.2	3	6
Work engagement	3.8	1.0	2	5
Organizational commitment	4.2	1.1	3	5
Turnover intention	1.5	0.8	0	3
Job satisfaction	4.0	1.0	3	5
Perceived organizational support	4.3	1.0	3	5
Psychological distance	2.5	1.2	1	4
Trust in supervisor	3.5	1.0	2	4
Trust in organization	3.2	1.0	2	4
Organizational identification	3.8	1.0	2	4
Organizational citizenship behavior	3.5	1.0	2	4
Organizational deviance	1.2	0.5	0	2
Organizational commitment (affective)	4.0	1.0	3	5
Organizational commitment (cognitive)	3.5	1.0	2	4
Organizational commitment (normative)	3.8	1.0	2	4
Organizational commitment (all)	3.8	1.0	2	4
Organizational identification (affective)	3.5	1.0	2	4
Organizational identification (cognitive)	3.2	1.0	2	4
Organizational identification (normative)	3.5	1.0	2	4
Organizational identification (all)	3.5	1.0	2	4
Organizational citizenship behavior (affective)	3.2	1.0	2	4
Organizational citizenship behavior (cognitive)	3.0	1.0	2	4
Organizational citizenship behavior (normative)	3.2	1.0	2	4
Organizational citizenship behavior (all)	3.2	1.0	2	4
Organizational deviance (affective)	1.0	0.5	0	2
Organizational deviance (cognitive)	0.8	0.5	0	2
Organizational deviance (normative)	1.0	0.5	0	2
Organizational deviance (all)	1.0	0.5	0	2

Probe Set	Probe Sequence	FRET/TARGET SET 2
U744 Probe set	5'-CTCTCTCGTCTCAACTTCAAATACCACTGTAATCT-NH2-3'	2430
p	5'-CTCAGGTAAATTTGTAGCCACCAGGATTTC-3'	2431
i	3'-NH2-GCAGAGTTGAAGTTATGGTGACATTAGA-5'	2432
a	5'- <b>TGGTCCAAGACCGACAGCAAAAATCTTGAG</b> -3'	2433
s		
A456 Probe Set	5'-CAGTCACGTCTCTTCAGGGAGTAGCGCA-NH2-3'	2434
p	5'-CCCCGTGGTAGGAGAGCACACTA-3'	2435
i	3'-NH2- <b>GCAGAGAAGTCCCCTCATCGCGT</b> -5'	2436
a		
C759 Probe Set	5'-CTCTCTCGTCTCGCCCCACCAGGATT-NH2	2437
p	5'-CTCCACCACGTCGCTCACGTAATTTGTAA-3'	2438
i	5'-AATCCTGGTGGCGGAGACG-B-3'	2439
a	5'- <b>TAACTTCAAATACCACTGTAATCTTGGTCCAAGACCG</b> -3'	2440
s		
G329 Probe Set	5'-ACCGAGGCGCACCAATTATTCCTAACG-b-3'	2441
p	5'-GCCGTTTCCAGAGTCCGATTGATTTTGA-3'	2442
i	3'-(biotin)- <b>GCGGTGGTTATAAAGGATTGC</b> -5'	2443
a		
C1763 Probe Set	5'-CATCTTCGCGGAGACATTTCTTGATGATTCCTT-3'	2444
p	5'-AAAGGTGTCTGGGCTCGTGCT-3'	2445
i	3'-(biotin)- <b>GCCTCTGTAAAGAACTACTAAGGAA</b> -5'	2446
a		
Phosphatidylinositol-3-phosphate p110 __, human (h-PI3Kp110_)		
G1045 Probe Set (FV Arm)	5'-AACGAGGCGCACCAAGTTTCTCTGTG-NH2-3'	2447
p	5'-GACCCAGCCCTGACATGAACCTTTTAC-3'	2448
i	3'-NH2- <b>GCGGTGGTCAAAGGAGACAC</b> -5'	2449
a		
C1521 Probe Set	5'-CTCTCTCGTCTCGGGAGGGTAATAAAGG-NH2-3'	2450
p	5'-GCTGCCCTTTTCAATAATCTTATCGAAC-3'	2451
i	3'-NH2- <b>AGCAGAGCCCTCCCATTTATTCC</b> -5'	2452
a		
C2667 Probe Set	5'-CTCTCTCGTCTCGTTGTATTCTTTAAGCCAG-NH2-3'	2453
p	5'-CGGTCCAGGTATCCCCAGAC-3'	2454
i		

136/145

a	3'NH2-AGCAGAGCAACATAAGAAATTCGGTC-5'	2455
G537 Probe Set		
p	FRET/TARGET SET 2	
i	5'-CTCTCTCGTCTCCTCTCTGGTGATATGTTTGG-NH2-3'	2456
a	5'-CTAAGTTTTCAGGGATGGATGGTTTCATGC-3'	2457
	3'NH2-AGCAGAGGAGACCACTATACAAAC-5'	2458
T3192 Probe Set		
p	FRET/TARGET SET 2	
i	5'-CTCTCTCGTCTCAACTGTGTGGGC-NH2-3'	2459
a	5'-TTAAGATCTGTAGTCTTTCCGAAC-3'	2460
	3'NH2-AGCAGAGTTTACACACCCCG-5'	2461
Cartilage-derived morphogenic protein 1, human (h-CDMP1)		
A831 Probe Set	FRET/TARGET SET 6	
p	5'-CCGTACAGCCTCCTGTTGCCCTCCC-(biotin)-3'	2462
i	5'-AGCCTCCAACCTTCAAGCTGT-3'	2463
a	5'-GGGAGGCAACAGGAGGCG-(biotin)-3'	2464
A1691 Probe Set	FRET/TARGET SET 5	
p	5'-CCGCCGAGATCACTGAAGAGGATGCTGATGG-(biotin)-3'	2465
i	5'-ACACCACGTTGTTGGCAGAGTCAAG-3'	2466
a	5'-CCATCAGCATCCTCTTCACTGATCTCGG-(biotin)-3'	2467
b-actin, rat (r-bACT)		
C1671 Probe Set (longer)	FRET/TARGET SET 6	
p	5'-CCGTACAGCCTCGCCTTAGGGTTCA-NH2-3'	2468
i	5'-TCTGGGTCATCTTTTCACGGTTGA-3'	2469
a	3'-GCCGAGCGGAATCCCAAGT-5'	2470
s	5'-GAGGGGCTCGGTGAGC-3'	2471
Bile Salt port Pump, rat (r-BSEP)	FRET/TARGET SET 5	
p	5'-CCGCCGAGATCACGAGTTCTTGCCCTTTC-(biotin)-3'	2472
p	5'-CCGCCGAGATCACGAGTTCTTGCCCTTTC-NH3-3'	2473
i	5'-TTCACACACGCTTTTCTGCTGATCTCC-3'	2474
a	3'-(biotin)-CTAGTGCTCAAGAACGGAAAG-5'	2475
G1288 Probe Set	FRET/TARGET SET 2	
p	5'-CTCTCTCGTCTCCAGAAAGGCCAGT-(biotin)-3'	2476
i	5'-TTCCTCATCTAGGACAAAGTGGAACCAATAA-3'	2477
a	5'-ACTGGCCTTCTGGGAGACG-(biotin)-3'	2478

137/145



C 1311 Probe Set

p 2504  
i 2505  
a 2506

FRET/TARGET SET 6

5'-CCGCCGAGATCACGTGTCTACGTTTAGAAG-(biotin)-3'  
5'-CACATGTACAATACCCCTCCTGCATTTTCAATC-3'  
5'-CTTCTAAACGTAGGACACGCTGATCTCGG-(biotin)-3'

Peroxisomal Proliferation Activator Protein Receptor beta, human (h-PPAR\_)

A595 Probe set

6B. Designed truncated probe and stackers to reduce temperature

p 2507  
i 2508  
a 2509  
s 2510

FRET/TARGET SET 6

5'-CCGTCACGCCCTCTCTTCTGAATCTTGC-3'  
5'-CTGGCACCTTGTGGGTTCTA-3'  
3'-NH2-GCGGAGAGAGACTTAGAACG-5'  
5'-AGCTGGGCTCACACTTCTCGT-3'

FRET/TARGET SET 6

6C. Design for new INVADER assay with 50% 2'-Me.

p 2511  
i 2512  
a 2513  
s 2514

5'-CCGTCACGCCCTCTCTTCTGAATCTTG-NH2-3'  
5'-CTGGCACCTTGTGGGTTCTA-3'  
3'-NH2-GCGGAGAGAGACTTAGAAC-5'  
5'-CAGCTGGGCTCACACTTCTCGT-NH2-3'

6D. Truncate probe.

p 2515  
i 2516  
s 2517

FRET/TARGET SET 6

5'-CCGTCACGCCCTCTCTTCTGAATCTT-NH2-3'  
5'-CCTGGCACCTTGTGGGTTCTA-3'  
5'-GCAGCTGGGCTCACACTTCTCGT-NH2-3'

C891 Probe Set

p 2518  
i 2519  
a 2520  
s 2521

FRET/TARGET SET 7

5'-AACGAGCGCACGGTAGGCATTGTAGA-3'  
5'-CCTTCTTTTGGTCATGTTGAAGTTTTCAC-3'  
3'-CGCGTGCCATCCGTAACATCT-5'  
5'-TGTGCTTGGAGAGGCCTTCA-3'

Substance P, rat (r-SubP)

C344 Probe Set

p 2522  
i 2523  
a 2524  
s

FRET/TARGET SET 6

5'-CCGTCACGCCCTGCCACCTGTTTTTCA-NH2-3'  
5'-CCATGCCCATAAAGAGCCCTTTAACAGGA-3'  
3'-NH2-GCGGAGCGGTGAACAAAAAGT-5'  
NO STACKER

A396 Probe Set

p 2525

FRET/TARGET SET 6

5'-CCGTCACGCCCTCTTTATGCCCTTTTGTGA-NH2-3'

i 5'-TGCCCATTTAGTCCAAACAAAGGAATCTGTGA-3' 2526  
a 3'-GCGGAGAAATACGGAAACACT-5' 2527  
s 5'-GAGATCTGACCATGCCCATAAAGAGGCC-NH2-3' 2528

C752 Probe Set  
p 5'-AACGAGGCGCACGCTGGCAAACCTTGT-NH2-3' 2529  
i 5'-CCTTTCTGTCTTTGGAGACTTGCATCA-3' 2530  
a 3'-NH2-CGCGTGGACCCGTTGAACA-5' 2531  
s 5'-ACAACTCCATCAACACTGTGCTTTGCTG-NH2-3' 2532

Hepatic Lipase, human (h-LIPC)  
A830 Probe Set  
p 5'-AACGAGGCGCACCTTAGGAAGTGGCA-NH2-3' 2533  
i 5'-GTGCTGGGCAATATGTCTGTAGAGCG-3' 2534  
a 3'-NH2-CGCGTGAGATCCTTCACCGT-5' 2535  
s 5'-GCCAGGCTGGAAGGAGC-NH2-3' 2536

C1154 Probe Set  
p 5'-CCGCCGAGATCACCGTCTCAGTTTGGT-NH2-3' 2537  
i 5'-CGAGTAGTGACATGGTAAAGTTGTTGATTGGCT-3' 2538  
a 3'-NH2-CTCTAGTGGCAGAGTCAAAACCA-5' 2539

Hepatic Lipase, rat (r-LIPC)  
G357 Probe Set  
p 5'-CCGCCGAGATCACCGTCTCAGGTT-NH2-3' 2540  
i 5'-GGGAGATCCAGTCCACTAATCCA-3' 2541  
a 3'-NH2-TCTAGTGGTGCAAGTCCCCAA-5' 2542  
s 5'-GGGACTGTCGGGACTTCAGG-NH2-3' 2543

C1167 Probe Set  
p 5'-GAACGGCAGGTTTGGGGAATTTCTTTATTCTT-NH2-3' 2544  
i 5'-ATTCCTTCGCCCAGGGTGATG-3' 2545  
a 3'-NH2-GTCCAAACCCCTTAAAGAAATAAGAA-5' 2546  
s 5'-CTTTTGTCCCCAGCAGTGT-NH2-3' 2547

Metabotropic Glutamate Receptor 2, rat (r-mGluR2)  
C1403 Probe Set  
p 5'-AACGAGGCGCACGCTGGTGGGA-NH2-3' 2548  
i 5'-GCCTCATAGCATCGCAGAGGTGT-3' 2549  
a 3'-NH2-CGCGTGGCACCACCAACCCCT-5' 2550  
s 5'-CAGAGGGCACGGTGCATGTTGT-NH2-3' 2551



G-protein coupled receptor 2, rat (r-ETBR-LP2)

A1629 Probe set

P  
I  
a  
s

FRET/TARGET SET 8

5'-GAACGGCAGGTTTGTCTCAGCAGACCGC-NH2-3'  
5'-GAGAGGCCAAAGTGAGACCATGTGAAAAGAAA-3'  
3'-NH2-CGTCCAAACAGTCGTCTGGCG-5'  
5'-CATGGATCGGCATGGCCCC-NH2-3'

2552  
2553  
2554  
2555

i kappa b alpha, human (h-MAD3)

C542 Probe Set

P  
I  
a

FRET/TARGET SET 7

5'-AACGAGGGCGCACGGTGTAGGGGGG-(biotin)-3'  
5'-GCCCTGCTCACAGGCAAT-3'  
5'-CCCCCTACACCGTGGCG-(biotin)-3'

2556  
2557  
2558

C363 Probe Set

P  
I  
A

FRET/TARGET SET 6

5'-CCGTCACGCCCTCGTCAGTCGCCCTTTTC-(biotin)-3'  
5'-CACCTGGCGGATCACCTCCATGT  
5'-GAAAAGGCACTGACGAGGCG-(biotin)-3'

2559  
2560  
2561

G953 Probe Set

P  
I  
A

FRET/TARGET SET 6

5'-CCGTCACGCCCTCCCTCATCTCACT-(biotin)-3'  
5'-ACTCTGACTCTGTGTCATAGCTCTT  
5'-AGTGAGGATGAGGGAGGCG-(biotin)-3'

2562  
2563  
2564

C923 Probe Set

P  
I  
A  
S

FRET/TARGET SET 7

5'-AACGAGGCGCACGGTTTCTAGTGTC-NH2-3'  
5'-CTCACTCTCTGGCAGCATCTGAAT-3'  
3'-NH2-CGCGTGCCAAAGATCACAGT-5'  
5'-GCTGGCCCCAGCTGC-NH2-3'

2565  
2566  
2567  
2568

Lecithin cholesterol acyltransferase, human (h-LCAT)

C821 Probe Set (truncated Probe Design)

P  
I  
a  
s

FRET/TARGET SET 5

5'-CCGCCGAGATCACGGTTATGCGCTG-NH2-3'  
5'-CCAGGGGGAGGTGGTC-3'  
3'-NH2-TCTAGTGCCAATACGCGACG-5'  
5'-CTCCTCTTTCAGCTTGATGCTGG-NH2-3'

2569  
2570  
2571  
2572

C827 Probe Design

P  
I  
a

FRET/TARGET SET 8

5'-GAACGGCAGGTTTGGGTGGTGTATGCG-NH2-3'  
5'-AGAGGGGAAACATCCAGGGGGAG-3'  
3'-NH2-CGTCCAAACCCACCAATACGC-5'

2573  
2574  
2575

C1217 Probe Design		
p	FRET/TARGET SET 5	2576
i	5'-CCGCCGAGATCACGAGATGCTGTATCCC-NH2-3'	2577
a	5'-GGTCAGGTTGCTGAAGACCATGTTG-3'	2578
	3'-NH2-TCTAGTGCTCTACGACATAGGG-5'	
Apolipoprotein A-1, human (h-ApoA1)		
A177 Probe Set	FRET/TARGET SET 6	2579
p	5'-CCGTCACGCCCTCTGAGCACATCCACG-NH2-3'	2580
i	5'-ACATAGTCTCTGCCGCTGTCTTA-3'	2581
a	3'-NH2-GCGGAGACTCGTGTAGGTGC-5'	2582
s	5'-TACACAGTGGCCAGGTCCTT-NH2-3'	
A227 Probe Set (titrate length of 2'-O-Me in Invader)	FRET/TARGET SET 8	2583
p	5'-GAACGGCAGGTTTGTCCCAAGGCGG-NH2-3'	2584
i	5'-GTCAAGGAGCTTTAGGTTTAGCTGTTTA-3'	2585
i	5'-GTCAAGGATCTTTAGGTTTAGCTGTTTA-3'	2586
i	5'-GTCCCAGTTGTCAAGGATCTTTAGGTTTAGCTGTTTA-3'	2587
A	3'-NH2-GTCCAAACAGGGTCCGCC-5'	2588
s	5'-AGCCTTCAAACCTGGGACACATAGTCTC-NH2-3'	
G350 Probe Set	FRET/TARGET SET 5	2589
p	5'-CCGCCGAGATCACCTTCTGTCTCCTT-NH2-3'	2590
i	5'-CTCCTGCCTCAGGCCG-3'	2591
a	3'-NH2-TCTAGTGGAGACAGAGAA-5'	2592
s	5'-TTCCAGGTTATCCAGAACTCC-NH2-3'	
G233 Probe Set	FRET/TARGET SET 11	2593
p	5'-AGAACGGCAGTCTTTCTGTTTCCCAAGG-NH2-3'	2594
i	5'-CCAGTTGTCAAGGAGCTTTAGGTTTAGT-3'	2595
a	3'-NH2-CGTCAGAAAGACAAAGGGTCC-5'	2596
s	5'-CGGAGCCTTCAAACCTGGGACACATAGT-NH2-3'	
Metabotropic Glutamate Receptor 1, rat (r-mGluR1)		
T934 Probe Set	FRET/TARGET SET 11	2597
p	5'-AGAACGGCAGTCTTTAGAAATAGCGATCTGT-NH2-3'	2598
i	5'-CACTCAGGTCTATGCTTGTGGCT-3'	2599
a	3'-NH2-GTCAGAACTCTTATCCGCTAGACA-5'	2600
s	5'-GGGATGTCGAACAGCTGGAGAAAGATTCT-NH2-3'	
Ubiquitin, human (h-UBIQ)		

142/145

G119 Probe Set (MO4 Arm)

p  
l  
a

FRET/TARGET SET 6  
5'-CCGTACGCTCCTTTACATTTTCTATCGTATCCG-(biotin)-3'  
5'-CCTTCCTTATCCTGGATCTTGGCA-3'  
3'-(biotin)-GCGGAGGAAATGTAAAAGATAGCATAGGC-5'

2601  
2602  
2603

G119 Probe Set

p  
l  
a

FRET/TARGET SET 5  
5'-CGCCGAGATCACCTTTACATTTTCTATCGTATCCG-(biotin)-3'  
5'-CCTTCCTTATCCTGGATCTTGGCA-3'  
3'-(biotin)-CTAGTGGAAATGTAAAAGATAGCATAGGC-5'

2604  
2605  
2606

G131 Probe Set

p  
l  
a

FRET/TARGET SET 9  
5'-CATCTTCGCGGACTGGATCTTGGCC-(biotin)-3'  
5'-GCTGATCAGGAGGAATCCTTCCTTATCT-3'  
3'-(biotin)-GCCTGACCTAGAACCCGG-5'

2607  
2608  
2609

Scanned G119 region (ELISA format (No Arrestors)

p  
p  
p  
p  
p  
l  
l  
l  
l  
l  
l

5'-CTCTCTCGTCTCTTACATTTTCTATCGTATCCG-NH2-3'  
5'-CTCTCTCGTCTCTTACATTTTCTATCGTATCCG-NH2-3'  
5'-CTCTCTCGTCTCTTACATTTTCTATCGTATCCG-NH2-3'  
5'-CTCTCTCGTCTCTTACATTTTCTATCGTATC-NH2-3'  
5'-CTCTCTCGTCTCGCCTTACATTTTCTATCG-NH2-3'  
5'-GGAATTCCTTCTTATCCTGGATCTTGA-3'  
5'-GGAATTCCTTCTTATCCTGGATCTTGGC-3'  
5'-CCTTCCTTATCCTGGATCTTGGCA-3'  
5'-TTCCCTTATCCTGGATCTTGGCCA-3'  
5'-TCCTTATCCTGGATCTTGGCCTA-3'

2610  
2611  
2612  
2613  
2614  
2615  
2616  
2617  
2618  
2619

Ubiquitin, mouse (m-UBIQ)

G294 Probe Set

p  
l  
a

FRET/TARGET SET 7  
5'-CCGTCACGCCCTCCCTTCTGGATGTTGTA-(biotin)-3'  
5'-CCAGGTGCAGGGTTGACTA-3'  
3'-(biotin)-GCGGAGGGAAGACCTACAACAT-5'

2620  
2621  
2622

G294 Probe Set

p  
l  
a

FRET/TARGET SET 5  
5'-CGCCGAGATCACCCCTTCTGGATGTTGTA-(biotin)-3'  
5'-CCAGGTGCAGGGTTGACTA-3'  
3'-(biotin)-CTAGTGGGAAGACCTACAACAT-5'

2623  
2624  
2625

G294 Probe Set

p  
l

FRET/TARGET SET 6  
5'-CCGTCACGCCCTCCCTTCTGGATGTTGTAAT-NH2-3'  
5'-CCAGGTGCAGGGTTGACTA-3'

2626  
2627

2628

3'-NH2-GCGGAGGGAAGACCTACAACATTA-5'

a

G294 Probe Set

p  
i  
a

FRET/TARGET SET 6

5'-CCGTCACGCCCTCCCTTCTGGATGTTGTAATC-NH2-3'  
5'-CCAGGTGCAGGGTTGACTA-3'  
3'-NH2-GCGGAGGGAAGACCTACAACATTAG-3'

2629  
2630  
2631

T514 Probe Set

p  
i  
a

FRET/TARGET SET 7

5'-AACGAGGCGCACATGTTGTAATCAGAGAGGG-NH2-3'  
5'-TGCAGGGTTGACTCTTTCTGGA-3'  
3'-NH2-CGCGTGTACAACATTAGTCTCTCCCC-5'

2632  
2633  
2634

G750 Probe Set

p  
i  
a

FRET/TARGET SET 9

5'-CATCTTCGCGGACCTTCTGGATGTTGTA-NH2-3'  
5'-GGACCAAGGTGCAGGGTTGACTT-3'  
3'-NH2-GCCTGGAAGACCTACAACAT-5'

2635  
2636  
2637

G185 Probe Set

p  
i  
a

FRET/TARGET SET 9

5'-CATCTTCGCGGACCTTCACGTTCTCGATGG-NH2-3'  
5'-CCCTCTTTATCCTGGATCTTGGCA-3'  
3'-NH2-GCGCCTGAAGTGCAAGAGCTACC-5'

2638  
2639  
2640

FIGURE 48

12		
1	8	C
2	5	U
3	5	U
4	2	U
5	1	U
6	2	C
7	7	G
8	7	A
9	1	U
10	1	C

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